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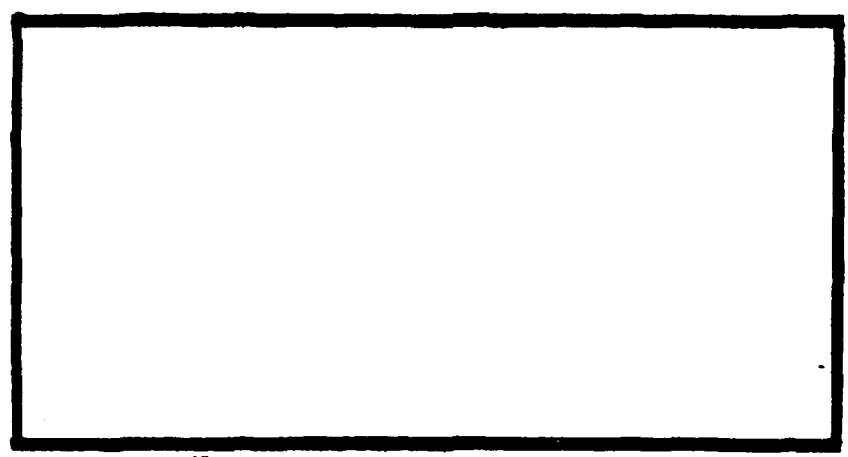


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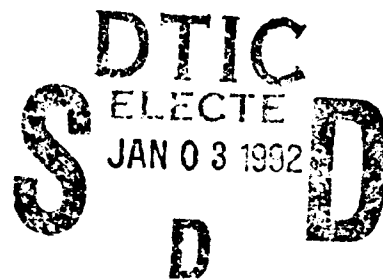
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THE
OPERATION OF MILITARY FAMILY HOUSING
AS A BUSINESS ENTERPRISE
A CASE STUDY AT LANGLEY AFB, VA.

THESIS

Michael T. Ray, Captain, USAF

AFIT/GEM/DEM/91S-11

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THESIS

Presented to the Faculty of the School of Systems
and Logistics of the
Air Force Institute of Technology
Air University
In Partial Fulfillment of the
Requirements for the Degree of
Master of Science in Engineering Management

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September 1991

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Michael T. Ray

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Abstract

The focus of this research was to determine the feasibility of operating Military Family Housing (MFH) as a business enterprise, based on rental income. A case study of the Langley AFB Military Family Housing operation during FY 90 was used to determine if housing allowances forfeited by residents of base housing would provide sufficient rental income for the annual operations, maintenance and capital improvement of the MFH assets. It further compared the descriptive data from Langley AFB, to USAF averages to determine if the findings at Langley were generalizable across the Air Force.

The case study showed that Basic Allowance for Quarters (BAQ) and Variable Housing Allowance (VHA) forfeitures of Langley MFH residents during FY 90 exceeded actual expenditures by 7%. This indicated that the Langley AFB MFH complex could operate as a business enterprise based on a rental income equal to the BAQ and VHA forfeited by its residents. A comparison of the MFH operation at Langley to USAF averages indicated that this may not be true across the USAF. Additional analysis of the data for MFH operations at other installations is required to determine if the same results could be obtained at other installations.

THE OPERATION OF MILITARY FAMILY HOUSING
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A CASE STUDY AT LANGLEY AFB, VA.

I. INTRODUCTION

As the United States military forces and specifically, the leaders of U.S. Air Force (USAF) plan for the future they are faced with the increasing challenge of satisfying requirements with fewer and fewer assets. As the Department of Defense (DoD) endures significant budget reductions, its leaders are constantly required to search out new ways to reduce costs without jeopardizing mission capability. Budget restrictions are impacting the management and operation of Military Family Housing (MFH). As the defense budget is reduced, the USAF may be faced with operating MFH with a budget based on potential income, as a business enterprise. To be managed as a business enterprise requires financial self sufficiency. The MFH operation must be capable of generating adequate cash flow to ensure survival.

The Defense Management Review (DMR) program was established by the Secretary of Defense (SECDEF) to investigate ways in which DoD agencies could streamline their organizations to save both money and manpower.

Proposals within the DMR program are called initiatives. Initiatives originate through suggestions within DoD organizations. Each initiative is numbered, and forwarded through the appropriate offices for review. When a review of the initiative is completed a Defense Management Report Decision (DMRD) is prepared and sent to the heads of the service agencies for comment. After service agency comments are received, the DMRD is forwarded to the SECDEF for a ruling on whether the initiative will be accepted or rejected, once rejected a DMRD may not be resurrected in its original form.

In 1990, the DoD considered DMRD #966, which proposed the operation of MFH assets as a business enterprise (DMRD 966, 1990:1). The DMRD maintained that forfeited housing allowances (Basic Allowance for Quarters (BAQ) and Variable Housing Allowance (VHA)) from members residing in base housing should be used as the baseline for funding those MFH assets. Military members occupying government quarters would be charged monthly rent equal to the amount they currently forfeit. This rental income would be used to establish a local revolving account for the operations, maintenance, renovations, management and replacement of the housing assets. All work performed within and all ancillary support provided to the MFH community at a particular installation would be funded through this account. This concept is similar to the industrial funds

used by the Military Airlift Command (MAC) and Air Force Logistics Command (AFLC).

Once the fund was established locally, all MFH projects would be prioritized and funded in terms of the benefit to MFH occupants at that particular installation. Locally controlled funds could allow commanders and base facility boards the appropriate flexibility to address local needs and provide the best housing possible for the military member. This study analyzed the feasibility of the concepts proposed by DMRD #966 through a detailed case study.

The funding of Military Family Housing appropriations is not currently keeping pace with the requirement for major renovations (Boatwright and Ahearn, 1989:593-595). Many of the MFH units operated by the USAF do not meet quality standards. The average age of MFH units is 30 years and most have undergone no major renovation (HQ USAF/CEH, 1991). Additionally, much of the support for military family housing communities comes from organizations funded through separate appropriations such as fire and police protection, grounds maintenance of community areas and public area utility costs for streets and pipelines. In the civilian sector, these costs are typically covered by property taxes included in a mortgage or rental payment. For the member living off base these taxes are a part of their cost of housing. If MFH

communities are to operate as a business enterprise the funds required to support all related activities must be budgeted for and controlled by the MFH activity. Therefore, these costs must be considered in an equivalence study. If accepted, the business enterprise approach will bring about significant changes in the budgeting and funding of MFH assets. This approval could have a drastic effect on how commanders at all levels manage MFH assets throughout the Air Force and the DoD.

If the military is to provide housing for its members in exchange for forfeiture of their housing allowances, it must ensure that these people are receiving adequate living quarters in return. Minimum adequacy standards for MFH units are established by AFR 90-1 (1990), based on unit size and overall condition. In the long term, sacrifices in the quality of housing may compromise the ability of the USAF to carry out its mission (Bland, 1990).

Research Objectives The objective of this research was to analyze the financial feasibility of the business enterprise approach to MFH through a detailed case study and determine if an installation could provide adequate housing for its military members under this approach. The objective was addressed through two specific questions.

First Objective. Can the MFH assets be maintained status quo using private sector management principles and incentives (as a business enterprise)?

Second Objective. Is the installation used in this case study generalizable across the USAF, i.e., How does the installation studied compare to USAF averages?

DMRD #966 was not approved by the SECDEF, therefore, as written it will not be readdressed. However, a separate report decision, DMRD #971, which introduces the concept of the Defense Business Operating Fund (DBOF) was approved. The DBOF concept simply states that support services within DoD should be capable of operating based on funds generated by providing a service. Because of the approval of the DBOF concept, the probability of the principles of DMR #966 being readdressed in the future is high (Fryer, 1990). This study was designed to provide senior leaders a detailed analysis which reviewed the financial implications of this DMRD. Implementation of the concepts outlined in DMRD #966 will undoubtedly reach beyond the financial realm into the managerial. This study was focused on the financial feasibility and did not address the organizational changes required for efficient implementation and operation of MFH as a business enterprise.

Scope This research was sponsored by the Directorate of Engineering and Services, Tactical Air Command, and entailed a case study of the military family housing complex at Langley AFB, VA. The case study involved a comprehensive analysis of the costs associated with the

operation of the Langley AFB MFH complex and compared these costs the equivalent BAQ and VHA forfeited by the MFH residents.

Chapter two of this research contains a brief history of Military Family Housing addressing why and when it was established. Alternative concepts for the operation, maintenance and management of housing assets such as leases and other DMRD initiatives provide a framework for the discussion of the recent business enterprise proposal. The recent history of DoD and USAF appropriations and funding trends illustrate the commitment of senior USAF leaders to the MFH program. And finally, a review of housing allowances, both in the military and civilian sectors, identifies how they were established and what they were intended to provide.

Chapter three explains the format for the case study. All current MFH funding avenues are defined as direct, indirect or capital improvement costs and the details of each category presented. The methodology in chapter three was based on actual fiscal year 1990 costs, (the most recent complete fiscal data available at the time of this study), from the Langley AFB MFH operation. The findings were reported in chapter four, and conclusions and recommendations based on these findings were discussed in chapter five.

In order to determine if MFH assets could be adequately maintained if operated as a business enterprise, the financial records for FY 90 at Langley AFB were analyzed. The data reviewed encompassed all aspects of the operations and maintenance of the MFH program at Langley. Chapter three provides a detailed breakdown of each type of costs and its relevance as either a direct, indirect or capital improvement cost.

The earlier comments from Secretary Boatwright and MGen Ahearn regarding MFH appropriations showed that most bases have a significant backlog in the required maintenance and repair of their MFH facilities. It is not the intent of this study to ensure that forfeited BAQ and VHA will provide adequate income to overcome this backlog. As stated earlier, the intent is to determine if the forfeited BAQ and VHA can keep pace with current and projected funding levels (*status quo*). This research does not address the adequacy of the *status quo*. The exercise to validate the adequacy of existing funding levels or to estimate required funding levels is beyond the scope of this research. Even recognizing these limitations, determining the financial feasibility of the business enterprise operation at Langley AFB represents a first step that is required if future proposals of the nature of DMRD #966 are to be effectively evaluated.

This study does not include General Officer Quarters (GOQs) in any part of the analysis. These quarters are operated maintained and accounted for under a separate set of rules from the rest of MFH which involves substantial Congressional oversight. Including data on these unique units would complicate this study and compromise its integrity.

Second Objective. For the conclusions of the first objective to be generalized across the USAF, the Langley AFB MFH operation must be shown to accurately represent the average USAF installation. The descriptive data from this study was compared to USAF wide data provided by HQ USAF/CEH. This comparison was based on four specific indicators: 1) annual cost of operation and maintenance per unit, 2) occupancy distribution by grade, 3) physical age of housing inventory, 4) number of units supported. These indicators are used to determine how the MFH operation at Langley compares to that of other USAF installations located in the Continental United States (CONUS).

II. BACKGROUND

The Defense Management Report Decision #956 recommends the operation of Military Family Housing as a business enterprise. Before being able to draw conclusions about the feasibility of such a concept, a clear understanding of the factors which effect the initiative is required. The review of these factors was accomplished through the discussion of four separate areas: MFH History, Housing Concepts within the DoD, MFH Appropriations and Housing Allowances.

Military Family Housing History The precedent for providing shelter for the members of the U.S. military was traced by DoD historians to 1782 when an act was passed which specified that a major general and his family would be provided with one-four horse covered wagon and one-two horse wagon (Yancy, 1991). These were the first provisions made for military members who travelled with their families. At that time these allowances were only required for the most senior officers because they were the only ones who could bring their families with them when they moved.

As the west began to be settled, forts sprang up across the frontier. These protective garrisons were built to provide facilities for the military members who also travelled west to protect the settlers as they began to

occupy new territories within our expanding nation. With these forts came the first military family housing. Officers were allowed to bring their wives to live with them. Within the forts, rooms were constructed to house the officers and their families. The rules were simple; a lieutenant received two rooms, a captain three, a major four and so on. The arrangement worked well until it was time for the military strength to be increased at these locations (Milican, 1983:4).

When the second platoon arrived at a fort, the rooms within its walls were all occupied and the officers and their families were forced to go into town and find a room to rent until one became available at the fort. This occurred around the late 1800's and was cause for the creation of the first waiting list for family housing. There were obvious inequities for the officers who could not get rooms on base, since there was no additional pay for rent (Milican, 1983:4).

The Basic Allowance for Quarters Act of 1872 provided five dollars per month per room to any officer who was unable to get housing at the fort. The Act made no provisions for enlisted personnel. The BAQ Act is significant in that "it established a precedent still valid today, which says that the military department will provide its members a house or money in-kind" (Milican, 1983:4). Milican's statement of "in kind" simply means that the

money provided to the military member will be sufficient for him to obtain quarters off base comparable to those on base.

During the years from 1870-1880 there was an unprecedented number of young officers who married and took their wives to the frontier. This created an extreme shortage of housing by the end of the decade. It was at this time that Congress realized that it would not be feasible to build houses for every married military member. Congress then developed a public policy still in effect today. The policy states, "the prime source of housing for military families is the adjacent private community" (Milican, 1983:4). Construction of housing by appropriated funds was, and still is, focused on areas where the surrounding community was unable to meet the housing demands of the military.

Through the years leading up to World War I some single family homes were built on military bases for the senior officers, but mass construction of housing on bases did not begin until 1939 when the Lanham Housing Act was introduced. This Act provided for the construction of homes to house the workers who were building World War II military bases. The homes were small and shoddily constructed, but were responsive to a need. Construction of family housing was stagnant through the years of WWII and was not revitalized until the early 1950s. At this

time the military was in transition with the birth of new weaponry controlled by the Strategic Air Command (SAC).

Due to the nature of their mission, most SAC bases developed across the country were in areas which did not have large communities nearby to provide adequate housing for the thousands of military members soon to arrive.

"From 1950 to 1970 the USAF was building between 2-3,000 houses a year through MILCON, and acquiring another 2-3,000 via Wherry and Capehart programs" (Milican, 1983:5). These were programs which allowed DoD to pay for the construction of homes with mortgages, thus reducing capital expenditures and enabling DoD to construct many more homes.

As the construction of housing increased, so did the annual appropriations from Congress for their maintenance. However, the money was not protected and was repeatedly spent on ammunition and jet fuel instead of MFH. In 1962 Congress enacted the Family Housing Management Account (FHMA) for implementation in FY 63, which ensured that all money appropriated for MFH would be spent on MFH. What was unique about the FHMA was that the appropriation was controlled by DoD, not the individual services. DoD would allocate the funds annually to the services, not Congress. (Milican, 1983:5) The services lived with this method for many years, but in 1981 the Defense Review Board suggested that the services were better able to "allocate an appropriate share of each services' resources to care for

family needs" (Milican, 1983:5). Later that year, Program Budget Decision (PBD) #319, Dec 18, 1981 was issued. It provided for the family housing account to be turned over to the services beginning with FY 83 (Milican, 1983:5), thus providing the framework for the construction, operation, maintenance and management of MFH we are familiar with today.

Housing Concepts within the DoD Over the years providing MFH in the traditional manner (construction), became a more and more difficult task. Therefore, DoD sought new ways to supply this housing. To completely understand the implications of the business enterprise alternative which this research will focus on, it is important to understand the other concepts which are in use or being considered for MFH operational management.

Today, the DoD is the nations largest landlord due to the homes acquired by the services through the construction program previously identified (HQ USAF/CEH, 1991). The ever increasing costs of operation and maintenance of facilities prompted DoD to investigate new ways of providing MFH without the responsibilities tied to ownership.

The following discussion is based on alternative ways to meet the demands for MFH.

MFH Contractual Services. Congress has authorized the Department of Defense service agencies to contract with private sector businesses to provide housing.

Section 801 of Public Law 98-115 authorized a test of the "build to lease program" through FY 90. This program authorizes the government to contract with local businesses for the construction of family housing units designed and built to service standards. Once completed, the government, as the lessor, makes all lease payments to the contractor and the units are assigned by the military housing office to military members for occupancy. The base and/or Major Command assumes liability for both rent and utility payments under the Section 801 contract. The military member does forfeit his or her housing allowances once occupancy is established. The operation and maintenance of the Section 801 units is completed by a separate service contract (AFR 90-1, 1990:99). This program was established to alleviate some family housing shortages, when these contracts are proven to be more economical than conventional construction.

Section 802 of Public Law 98-115 authorized a Rental Guarantee Program through FY 90. This program is very similar to the Section 801 program in that it was designed to help bases alleviate their housing shortages. In the Section 802 method the government guarantees a minimum occupancy rate of 97% over a twenty five year period in

exchange for affordable rates and priority placement to military families (AFR 90-1:99). For a project to be approved it also must cost less than military construction. The primary difference between 802 and 801 is that in 802 the service members do not forfeit their housing allowances, and they are responsible for paying the monthly rent to the businesses. This program has not been well received by private contractors and, in fact, no Section 802 projects have awarded. The primary problems with the 802 program seem to be the ability of DoD to cancel the contract at anytime if it determined that maintenance was not being properly performed and the inclusion of utility costs in the monthly rental rates (GAO, Apr 90:12). Current legislation is being reviewed which would eliminate the possibility of subjective cancellation and allow the utility costs to be paid for from appropriated funds. The DoD hopes that this will increase the contractor interest in the 802 program (GAO, Apr 90:12).

The Office of Management and Budget (OMB) Circular A-76 defines a process most closely associated with privatization. "Privatization is a generic term describing the process of achieving greater reliance on the private sector to satisfy the needs of the United States" (Lovitky, 1986:12). The Circular A-76 states that for a given function to be privatized, a savings of at least 10% must be realized (Osgood, undated:32).

In 1988 the General Accounting Office (GAO) completed a study that provided specific information as to which functions of the Department of Defense would have the greatest potential for savings from implementation of OMB Circular A-76. The study began its findings by identifying three broad categories of functions, one of which was facilities, grounds and utilities maintenance. Based on 251 past DoD cost comparison studies completed at the time of this GAO report, A-76 type initiatives on facilities had saved the DoD over \$89 million (GAO, Apr 88:2). The November 1988 study revealed savings of \$54 million based on 129 functions contracted out and savings of \$34 million on 122 functions retained in-house (GAO, Nov 88:16). These studies showed that the A-76 process is a viable option for the management of facilities within the DoD. At this time, the USAF does not operate any MFH assets under this process, however future implementations are a distinct possibility.

Defense Management Review Proposals. In October 1989 the Department of Defense considered a Defense Management Report Decision (DMRD) #910, which proposed the transfer of DoD Family Housing to the Private Sector. The intent of the DMRD was to provide better equity in the distribution and use of housing allowances by military families, provide more efficient and cost effective maintenance of family housing units, and finally release ownership, and the

accompanying responsibilities, of DoD housing (DMRD 910, 1989:1). It was initially believed that these intentions would provide the service members with better housing at substantially less cost to the government. The DMRD provided three detailed alternatives as a means of meeting these intentions.

1. Provide all military families with cash allowances for housing, and charge market rents for DoD family housing yielding a savings of \$506 million in FY 1991.

2. Contract out the operation and maintenance of DoD housing saving \$60 million and reducing civilian end strength by 2547 in FY 1991.

3. Sell or permanently lease DoD housing, providing revenues of \$3 200 million and reducing civilian end strength by 2037 in FY 1991.
(DMRD #910, 1989:1)

Under alternative one, the DoD retained ownership of the housing units and charged rent to the occupants based on market rates. "It is estimated that at market rates the housing would rent for at least 21% more than current housing allowances" (DMRD 910, 1989:2). Therefore, on base residents would be expected to pay an average of 21% of their basic rent and all utility charges over and above their allowances. The DMRD stated that members were willing to pay the additional amount for the security and proximity of living on base (DMRD 910, 1989:2).

The feasibility of alternative two within the DMRD was based on an annual savings of 10%, required by OMB Circular A-76 for the action to be approved.

Alternative three got the DoD out of the military family housing business totally. Members received their appropriate allowances, and rental of units on base was based on the restrictions of the private sector management group. Defense Management Report Decision #910 was not well received by the Service Secretaries, and formal replies were provided to the Secretary of Defense outlining the adverse impacts of all three alternatives. The Secretary of the Air Force pointed out that before market rental rates could be charged, the housing would have to be brought up to contemporary standards, the cost of which would greatly exceed the identified savings. (USAF Memo, 1989:1) The Secretary of the Navy stated that these alternatives reverse 200 years of traditional benefits by breaking faith with the military member, and would produce "a severe and immediate decline in the quality of life and morale of personnel residing with their families in government housing" (USN Memo, 1989:1). Finally the Secretary of the Army stated that although the alternatives had some financial merit "it would be unconscionable to fund these savings out of families' pockets when they are already financially burdened by a transient lifestyle" (USA Memo, 1989:1).

Although the DMRD #910 was not approved, many of the concepts identified were reworked based on the comments of the Service Secretaries. Incorporation of these comments

led to the creation of the DMRD #966. The primary focus of the DMRD #966 was also on housing allowances, yet the philosophy changed somewhat. The adverse comments towards DMRD #910 were capsulized by the US Army's statement above. The service member would provide the savings for the DoD by increasing his or her out of pocket expenses. The DMRD #966 specifically addressed that issue and took the burden off the service member and placed it on the services (DMRD #966, 1990:1).

Under DMRD #966 the military member would experience little change in the operation or cost of living on base. The change within this initiative was with the funding philosophy. As previously stated, the DMRD suggested that each base's MFH program be funded based on the housing allowances currently forfeited by their occupants (DMRD #966, 1990:1). Although the DMRD #966 was not approved the concept it embraced is very much alive in DMRD #971.

The Defense Management Report Decision #971 developed the concept of the Defense Business Operating Fund (DBOF) which simply states that, "the financial system should collect all of the costs related to an output" (DMRD #971:2). The financial system refers to base support in a broad sense. The DBOF is patterned after the existing concept of industrial funds, in which funds used to provide a particular service are based on the cost of that service to the user.

Defense Management Report Decision #971 states that the funds generated by charging for a particular service should provide adequate income to maintain that service at a level acceptable to its customers.

The requirements on the level of performance and support required of the support establishment should be established by its customers, and reflected in the prices charged those customers.
(DMRD #971, 1990:2)

In essence, DMRD #971 provides the avenue for DoD Comptrollers to investigate, if not require, that MFH be operated on a self sustaining basis. This research analyzed this concept using actual costs and potential incomes at Langley AFB, to clearly illustrate whether or not DBOF management principles can be applied to Military Family Housing.

Military Family Housing Appropriations The annual expenditures within the Military Family Housing appropriations are intended to: provide sufficient funding to operate, maintain, and improve units already in the inventory; renew leases currently being held by the service departments; and secure additional leases or construct new units to eliminate the housing backlog in military communities. Annually, each service department must develop a budget request for their anticipated expenditures within MFH communities as a part of the overall service budget request to Congress. Department of Defense funding has dropped over the past few fiscal years, and the U.S.

Air Force budget has been reduced accordingly (Fryer, 1990). Despite the reduction in DoD and USAF budgets, MFH appropriations have increased, as illustrated by Figure 1. The USAF has increased its commitment to providing quality housing to its members by sacrificing other programs to divert funding to MFH appropriations.

"The Air Force is prepared to plus up its budget for military family housing improvements ... what we will often have to do is offset that (plus up) from other programs" (Ahearn, 1990:600).



Figure 1. USAF Military Family Housing Appropriations (HQ USAF/CEH)

The "plus-ups" mentioned by General Ahearn refer to actions by the USAF to reinstate the housing program after cuts received during the Program Objective Memorandum (POM) process. In simple terms, the USAF prepares a Budget Estimate Submission (BES) for MFH for the Office of the Secretary of Defense (OSD). OSD reviews the BES, makes cuts to it and submits the revised BES to the Office of Management and Budget (OMB) for inclusion in the President's Budget (PB) and submission to Congress. After the BES has been submitted to OSD and before it is forwarded to OMB, the services can request the authority from SECDEF to realign funds within it's BES. Basically, the USAF can ask SECDEF for permission to volunteer larger reductions in certain programs to protect the funds budgeted for other programs, hence "plusing-up" the MFH account from other USAF accounts.

The effectiveness of plus ups within USAF MFH appropriations can only be judged based on real growth. Real growth can be defined as an increase in the budget over and above an increase in established costs due to inflation. These established costs are affected annually by inflation, contractual negotiations, increase in assets, etc. Real growth provides the capability to do more financially than you were able to do in the previous year. The budgetary increase within MFH from FY 85 to FY 86 resulted in a 1% real growth (Appropriations Subcommittee, 1986:604). The

increases for FY 90 and FY 91 each represent a 7% real growth in funding (Boatwright and Ahearn, 1989:596).

Mr. James F. Boatwright, Deputy Assistant Secretary of the Air Force for Installations, made a public commitment to the importance of this real growth in MFH funding. During his presentation to the Subcommittee on Military Construction, Committee on Appropriations, U.S. House of Representatives, he implied a direct relationship between the quality of family housing and military member retention.

Over three fourths of our housing occupants are the families of junior sergeants and junior officers. These young service members have just reached the point in their careers where they are fully trained to perform in their chosen specialties. We recruited these readiness trained skilled aircraft technicians and aircrew members, but it will be a family decision to stay. The quality of the homes and neighborhoods where these families live, whether in the local community or on base, strongly influences this important career decision. We must provide contemporary housing for our families if we are to retain our skilled force. We cannot afford to pay the higher training bills for replacements nor the reduced readiness caused by young families deciding to leave the Air Force to find a better family life in the private sector. (Boatwright, 1989:593)

In 1990, Capt David Bland, a Graduate Engineering Management student at the Air Force Institute of Technology, through a survey USAF personnel, confirmed Mr. Boatwright's statement by showing that in fact the availability and quality of MFH had a direct influence on a member's decision to remain on active duty in the USAF (Bland, 1990).

The funding profiles and senior leadership commitments identified establish the importance of providing quality

family housing for military members. As the overall USAF budget declines, senior leaders are faced with sacrificing more and more critical funding to adequately support MFH. To avoid detrimental cuts in other important programs, the search for more economical means of providing adequate housing is constant.

Housing Allowances Housing allowances authorized for the military member are the primary financial factors upon which the feasibility of this study is based. Because of their importance, a complete understanding of the establishment, intent and evolution of these allowances is critical.

The total allowance provided to each military member assigned within the CONUS for housing is actually two separate allowances: The Basic Allowance for Quarters (BAQ) and the Variable Housing Allowance (VHA). Both are authorized for military members who are not occupying government quarters. Other housing allowance systems such as "Rent Plus" do exist, however this system is used solely for overseas locations and will therefore not be discussed in this research.

Basic Allowance for Quarters and Variable Housing Allowance. Title 37, section 403 of the United States Code states, "a member of a uniformed service who is entitled to basic pay is entitled to a basic allowance for quarters" (U.S.C.:914). Section 1009 of the same code prescribes the acceptable monthly rates for the members according to their

pay grade (U.S.C. 37,403:1009). A member of a uniformed service who is assigned adequate government quarters is not entitled to a basic allowance for quarters (U.S.C. 37,403:914). Appropriate quarters may constitute government leased as well as government owned quarters.

In the late 1970's it became evident that BAQ alone was insufficient in many geographical areas to cover the cost of housing. To prevent the high cost of housing from eroding the purchasing power of the military member's basic pay, a form of geographic adjustment was sought. In 1980 the VHA was implemented to defray the high costs of housing and was provided as a supplemental allowance in addition to BAQ (Ahearn, 1989:1143).

A member of a uniformed service entitled to basic allowance for quarters is entitled to a variable housing allowance whenever assigned to duty in an area of the United States which is a high cost area with respect to that member (U.S.C. 37,403a:934).

An area shall be considered to be a high housing cost area with respect to a member of a uniformed service whenever the average monthly cost of housing in that area for members serving in the same pay grade as that member exceeds 115% of the amount of the basic allowance for quarters of that member (U.S.C. 37,403:923).

The total of BAQ plus VHA was intended to cover 85% of the nationwide median housing costs, so that the military member would only have to pay 15% of the cost of living off base from his/her basic pay. The VHA rates were established for geographical areas based on data from the national

housing survey, completed by the US Census bureau (Ahearn, 1989:1143).

The BAQ rates are increased in two ways: under amendments to the United States Code and through Congressionally authorized increases to military pay. Figure 2 indicates the growth of these allowances for military members.

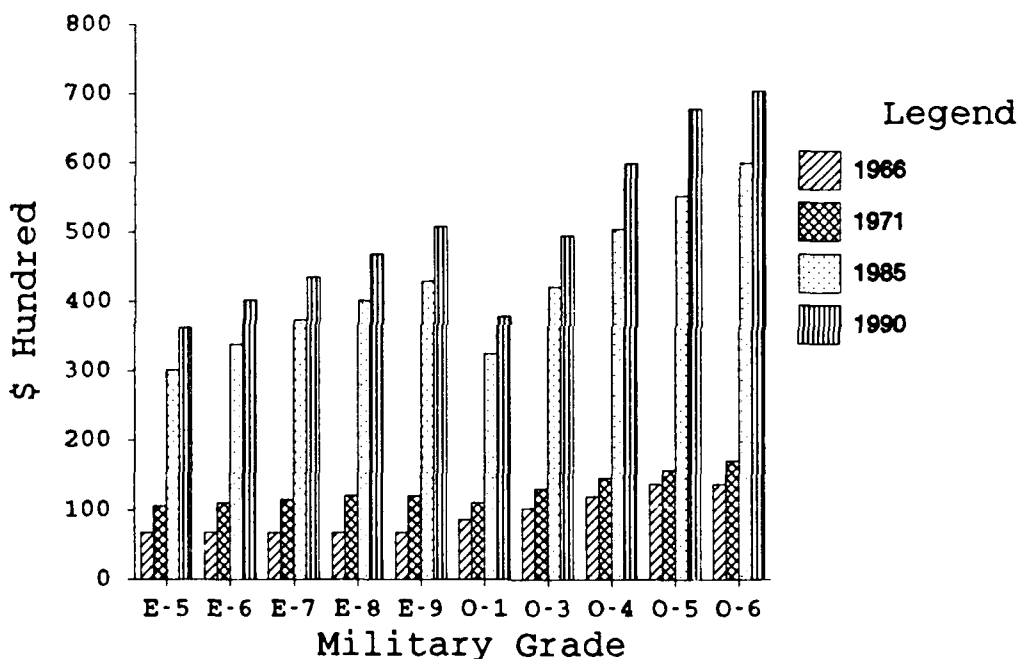


Figure 2. Basic Allowance For Quarters (BAQ)
(U.S.C., Title 37, Section 403)

In the fiscal year 1990 Appropriations Hearings, the Department of Defense requested \$6.7 billion for housing allowances. This equated to approximately \$8,700.00 per

officer family and \$5,700.00 per enlisted family annually for all of the uniformed services (Stone, 1990:642). These totals include the authorizations for both BAQ and VHA.

As stated above, the combination of BAQ and VHA was intended to cover 85% of the service members actual housing expenses. However recent studies have shown that this is not the case. The cost of housing for military members reached 20% in FY 87 and 22% in FY 88 over and above their authorized allowances (Ahearn, 1989:1143).

Public Housing Allowances. Housing allowances are not unique to the military. The civilian sector has been using them to provide adequate housing to citizens for many years. In 1980 the U.S. Department of Housing and Urban Development commissioned a study to compare housing allowances and other rental housing assistance programs. The analysis was based on the Housing Gap Minimum Standards. These standards addressed payment of allowances which were

conditioned on household size and income, intended to make up the gap between modest existing standard housing and the amount that a household might reasonably be expected to afford for housing from its own resources (from 15 to 35 percent of income) (HUD, 1980:S-1).

This philosophy is very much in line with the intent of the military housing allowances previously described.

The HUD study compared the housing allowances to three other forms of housing: Owned Public Housing, Section 236 leasing, and Section 23 leasing. In Public Housing and Section 236, the units are either newly constructed or

renovated and are offered to eligible households at rents below costs. The extent of the subsidy is based on income and household size (HUD, 1980:S-2). Section 23 leased housing program is similar to the housing allowances program in that they both use existing housing rental stock. Under Section 23, the units are leased by the Public Housing Authority and sublet to eligible households at below market costs. (HUD, 1980) A key point in Section 23 and Housing Allowance programs is that the operations and maintenance costs lie with the owner, not the lessor. Subsidies are intended to provide for the cost of the basic rental of the unit and annual utility fees.

The HUD study provided actual data from housing demand experiments completed in Pittsburgh, PA and Phoenix, AZ. The data from the Pittsburgh experiment, synopsized in Figure 3, clearly showed that the Housing Allowance Program cost the cities significantly less than the other programs. "The two-site average annual cost per unit for Housing Allowances was \$2,115; the corresponding averages for Public Housing and Section 236 were \$3,858 and \$3,854" (HUD, 1980:S-3). Figure 3 graphically illustrates the costs of the four separate programs based on the data from the Pittsburgh, PA experiment.

The overall findings of the HUD study indicate that the lower costs of Housing Allowance Programs give it a sizeable

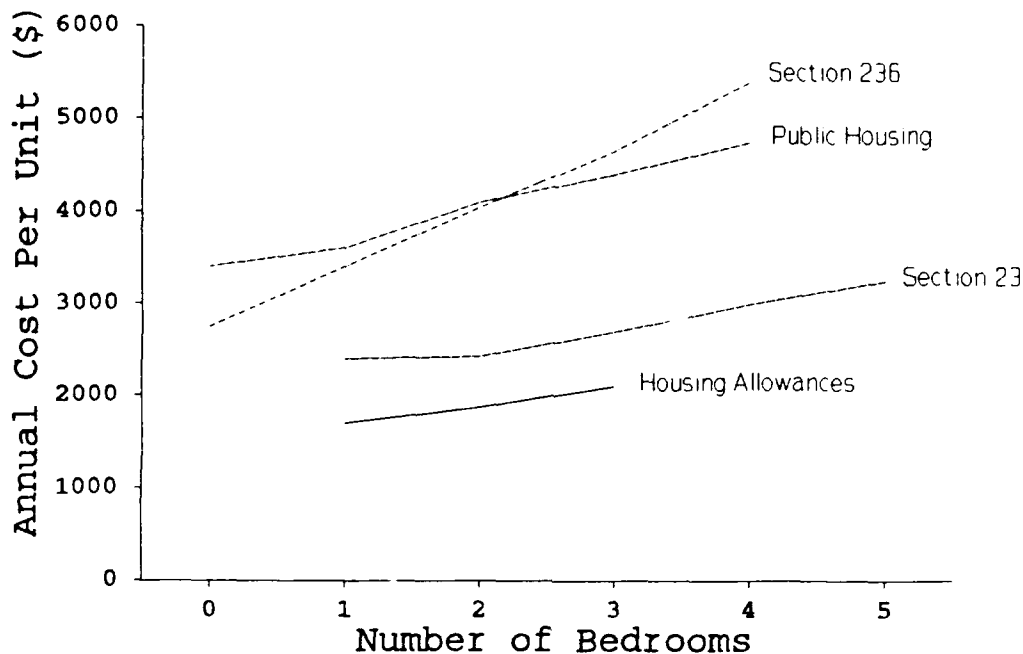


Figure 3. Total Annual Costs For Public Housing Units, Pittsburgh, PA.
(U.S. Dept of Housing and Urban Development Study, 1980).

advantage over owned asset programs in serving the eligible tenants (HUD, 1980:51).

For a given subsidy budget, and for tenants in each program paying identical amounts for rents, Housing Allowance Programs could serve from roughly two to three times as many tenants as could either Public Housing or Section 236.
(HUD, 1980:S-7)

Public Housing management concepts are standardized nationwide, yet each area of the country operates it's housing under differing regional conditions. What are deemed to be successful concepts in one area of the country, may not be as successful in other areas. A meeting was held

with Mr. Tom Tassillo, Director of Maintenance for the Newport News Housing and Redevelopment Authority (NNRHA), to discuss public housing concepts in the local communities surrounding Langley AFB. According to Mr. Tassillo, the communities which retain the best unit and community condition, as well as best reputation for lower crimes and problems, are those privately owned and occupied through a HUD rental subsidy or voucher program (Tassillo, 1991).

This voucher program is organized as a means of providing public housing, formally referred to as Section 8. Under the Section 8 housing, the government pays the rent to the landlord, and the tenants pay a monthly rent to NNRHA equal to 30% of their monthly income (Tassillo, 1991). Each tenant is authorized an allowance for utilities which is included in the 30% payment. However, if the tenant should exceed their utility authorization, they are billed and must pay the additional charges to NNRHA. According to Mr. Tassillo, the voucher program allows tenants to break the stereotype of public housing, occupant's develop a sense of pride in their homes and communities. The voucher program provides better quality housing, and releases the government from the costs and burden associated with owning the facilities (Tassillo, 1991).

General Accounting Office Findings. A recent General Accounting Office report, *A Comparison of Defense Department's Methods for Providing Military Family Housing,*

concluded that "housing allowances, which assist service members in obtaining housing in the private market, are the preferred approach to providing military family housing" (GAO, Apr 90:1). The study reinforced the GAO's belief in housing allowances by commenting on the importance of the flexibility of these allowances in today's relatively unstable military environment. With the current trends of a shrinking DoD budget, base closures, and troop strength reductions, it is risky to commit to the long term methods to provide adequate MFH such as new construction, Section 801 and Section 802 programs (GAO, Apr 90:8). Yet even in areas where the future military presence is secure, the current overall funding within the DoD is making these alternatives less feasible.

Summary This section discussed the factors affecting a decision to operate MFH as a business enterprise. Historical precedent, recent USAF funding and MFH methodology show a commitment to providing quality housing for military members. Housing allowance programs were illustrated to be the most economical method of meeting this commitment. The question to be answered by this case study was whether or not these allowances could cover the government's cost of ownership.

III. METHODOLOGY

The objective of this research was to analyze the feasibility of operating MFH assets as a business enterprise. The analysis was based on two investigative questions. First, can the MFH assets at a particular installation be operated and maintained status quo if the only source of funding is the equivalent BAQ and VHA forfeited by its residents? Second, can the findings from the installation studied be generalized to allow inferences to be made across the USAF and potentially DoD?

To answer these questions, the research had two objectives: 1) perform a case study of the Military Family Housing operations at Langley AFB, Va. during fiscal year 1990; and 2) compare the overall descriptive data from Langley to USAF average data provided by HQ USAF/CEH. The FY 90 financial records of the Langley MFH program were compared to the equivalent BAQ and VHA forfeited in FY 90 by the MFH residents at Langley. Annual costs per unit were developed and compared to USAF averages. An interpretation of the results of this comparison was presented in a feasibility analysis designed to answer the investigative questions posed above.

The MFH complex at Langley is divided into two primary areas: main base and Bethel Manor. There are 371 units located within the perimeter of the main base. Most of these units are duplex or single family homes occupied by

officers. The majority of the enlisted members living on base occupy Bayview Towers, a ten story high rise. Bethel Manor is a community of 1297 units geographically separated from the base. It consists of single and multi-family units occupied by both officer and enlisted members. Statistically, the units on base represent 23% of the MFH units, while the Bethel Manor units represent 77%. Additionally, the MFH units on base represent 29% of the total number of facilities on Langley AFB.

Case Study The accuracy of this case study is dependent on an accurate representation of the costs of operating and maintaining the MFH at Langley. Many of the costs associated with MFH are easily identified and are accounted for through program elements (accounts which distinguish the type of funds) and ultimately totaled in the annual president's budget, herein referred to as direct costs. Yet, many of the costs associated with operating MFH as a business enterprise are not directly accountable in the current military budget system. MFH communities rely a great deal on the infrastructure of the base and local communities for indirect support. This infrastructure includes public utilities such as sewer, water and steam lines, and fire and police protection. The costs for these services were included in this study and referred to as indirect costs. The funding for major renovation and/or expansion of MFH units is separately accounted for under

the Capital Improvements Program. Within this program funds are directly appropriated by Congress and can span more than one fiscal year. For this study, the capital improvement expenditures at Langley were averaged for one fiscal year and then combined with the direct and indirect costs to determine the total annual MFH cost per year.

The total annual costs for the FY 90 Langley AFB MFH program were calculated based on a detailed listing of all direct, indirect and capital improvement costs. All direct costs reported were actual FY 90 expenditures. The indirect costs reported are actual costs associated with the Bethel Manor housing area. Estimates of indirect costs associated with the main base housing were determined on a per unit basis.

Direct Costs. Currently, USAF civil engineering is responsible for the operation, maintenance and management of MFH. At Langley AFB that unit is the 1st Combat Support Group, Civil Engineering Squadron (1CSG/DE). Within this organization there are many branches which directly effect the overall management of MFH, however, the financial management branch (1CSG/DEU) is solely responsible for accounting for all expenditures within the squadron and MFH. All funds expended during a fiscal year for Langley's MFH operation are reported to and/or monitored by 1CSG/DEU.

The financial management branch accounts for MFH funds annually through Program Elements (PE). Program elements

are accounts which distinguish the end use of the funds. Within PEs there are Expense Elements, specific categories identifying the type of service or product obtained in support of items authorized under the PE. As stated above all direct costs are accountable in PEs, therefore this research followed the PEs in determining the actual expenditures for the MFH at Langley in FY 90. The actual expenditures are listed in chapter four of this research by PE. The following is a detailed explanation of the PEs identified and the expenditures covered by each.

Program Element 72110 supports all direct administrative costs associated with the operation of the Military Family Housing Office. Expense elements within this PE include all salaries paid to the civilian employees working in the office for both management and housing referral. All travel and transportation costs were included, whether for local reimbursement or temporary duty out of the area. The costs of general support equipment and/or rental of temporary equipment were identified. The PE covers all contract education costs associated with office personnel training and professional development, as well as all general supplies required to operate the office efficiently, from pens and pencils to office furniture.

Program Element 72120 covers the costs for municipal type services such as refuse collection and disposal, custodial services, entomology, and the supplies related to

support these services. The expense elements again cover the civilian pay expenses for those individuals who were directly employed by the base to provide these services using government resources. Personnel expenses for those services provided by contract were included in the contractual cost and were not separately identified in the civilian pay expense element. Air Force supplies identified in this PE represent the government resources required to provide the services mentioned above. USAF military manpower used to support these services were included under the indirect cost elements.

Program Element 72140 supports the cost of all government owned furnishings provided to MFH occupants. The costs within this PE include expenses for the life cycle replacement, storage, maintenance, moving and handling of all the furnishings inventory. Contractual services obtained for the maintenance of these furnishings were separately identified within this PE, as were supplies acquired through the Non Air Force Supply Fund (NAFSF).

Program Element 72811 accounted for all utility services, whether generated on base or obtained from commercial companies. MFH communities and the MFH office were separately metered for all utilities utilized and each utility service is separately expensed within the PE.

By far the largest and most complex PE for MFH is 722XX. This PE provides the funding for all maintenance

and repair for buildings, roads, driveways, walks, utility systems and grounds within the MFH community. It also provides the funding for all maintenance, repair and replacement of installed equipment such as hot water heaters, furnaces, dishwashers and air conditioners. The expense elements within this PE are extensive and account for such items as, civilian pay for base employees who provide a service to MFH, transportation, equipment and supply expenses required to provide this maintenance. Contractual costs of both construction and service contracts were also accounted for. Military manpower costs were not accounted for within this PE. They will be included in the indirect costs for military manpower services to MFH.

To expand on the recurring maintenance provided to each unit, the Base Civil Engineering (BCE) work order, job order and routine work program records for MFH were included in the expenses reported in chapter four. Work Orders (WO) describe non routine work required such as minor facility modifications or renovations. They cover projects which repair utility systems in the units and/or upgrade portions of the units such as the kitchens or bathrooms. Job orders (JO) describe routine work such as fixing leaky faucets or broken windows. The Recurring Work Program (RWP) describes work accomplished on a periodic, seasonal, or yearly basis such as cleaning the gutters or

painting. These types of work can be accomplished by BCE personnel or via contract. Much of the RWP is accomplished during the summer months when change of occupancies are highest and outdoor conditions are most favorable. During these periods, BCE organizations often hire additional personnel to meet the demands on a particular work center. The cost for these additional personnel was also included in the personnel costs analysis portion of this study.

Any work accomplished for the benefit of the MFH unit via these methods is reimbursable to the LCSG/DE and therefore accounted for within the MFH accounts.

Base civil engineering operates a self-help store which provides MFH residents with basic materials to perform routine maintenance and minor improvements to their units. Self-help projects in housing such as painting or replacing light fixtures are typical. These material costs also represent annual expenses attributable to MFH, and were accounted for in PE 722XX.

These program elements represent the bulk of the annual operating and maintenance expenditures for MFH. All of these costs were identified both by PE and expense element in chapter four. These costs were combined with the indirect costs and the capital improvement costs to determine the overall annual operating costs for MFH at Langley.

Indirect Costs. To sustain itself the MFH operation must be capable of paying the bills, on a reimbursement basis for the miscellaneous services which are vital to the MFH community. Military members who occupy MFH do not pay community or property taxes. However, the services which civilian communities provide with these taxes must still be provided and paid for in military communities. The cost for fire and police protection, as an example are funded with a separate appropriation from the MFH accounts. If MFH is to operate as a business enterprise and in fact maintain self sufficiency, it must be capable of paying its "fair share" for community services.

The costs of these community services were identified as indirect costs in this study. Where possible, actual costs were reported for the expenses in chapter four. Where the costs directly attributable to MFH were not available, estimates were developed. The derivation of those estimates is provided in the following section.

Security Police Support. The Security Police Squadron (1 CSG/SPS) at Langley AFB provides routine service to the MFH communities both on the main base and within Bethel Manor. The expenses for their services on the main base are not directly accountable, yet those for Bethel Manor are. The 1 CSG/SPS provides a monthly report to 1CSG/DEU listing the actual services provided to the Bethel Manor community. 1 CSG/DEU in turn calculates the

cost of these services for inclusion in the monthly report for Non-BCE support to MFH, submitted to the wing accounting office. The annual costs for Bethel Manor are directly attributable to the units supported, and a per unit cost is easily derived. The per unit cost associated with support provided to Bethel Manor was calculated and applied to the units on the main base. This pro-rata estimate is considered valid due to the fact that the service provided to both MFH communities is relatively the same.

Fire Department Support. As with the security police support, the costs associated with providing fire protection to the Bethel Manor community are directly accountable. The fire department's support to MFH goes beyond their responsibility to respond to any fire related emergency within the MFH community. In fact, they are not equipped to fight a major fire, and rely on back ups from other base units and the local community. On a day to day basis the fire department is responsible for training and fire prevention education for all MFH residents. The Bethel Manor fire department alone was responsible for an average of 40 training/inspections per month within their community in 1990 (Bowen:1991).

The expenses for fire protection services are accounted for the Bethel Manor fire department, including personnel, equipment and facility costs. These costs were

used to derive a per unit cost for Bethel Manor, and, as with the security police support, the per unit cost was applied to the main base units to derive a cost for the same services provided.

Public Utility Support. The utility service for housing units located on the main base at Langley is directly accountable and identified in the direct cost section. The MFH community relies a great deal on public areas in and around the MFH community, and the costs of the utility services to these areas are not directly accountable. Although the MFH account would provide funding for any work done to the utility lines within the MFH area, it does not at this time fund for repairs required to the main lines servicing the base. However, in Bethel Manor, MFH accounts do pay for utility upgrades because it is strictly a housing community. The infrastructure at Langley supports all the facilities located on the main base. The MFH "fair share" funding of public utilities was derived based on the FY 90 infrastructure expenditures and the percentage of units supported. The MFH units on the main base at Langley represent 29% of the facilities on base. Although the MFH units comprise 29% of the number of facilities on base, it is unlikely that they utilize the same percentage of public utilities when compared to industrial and aircraft support

facilities. Therefore, the estimate of 29% of the total public utility costs applied to MFH was very conservative.

Military Manpower Cost. The labor expense for work accomplished within MFH by active duty military members is not charged to MFH accounts. It is paid by separate Military Pay appropriations. In effect it is free labor. Typically military members at Langley do not perform routine maintenance on the MFH units at Langley, however they do perform emergency maintenance and entomology services (Hale, 1991). These costs would be accountable in the business enterprise approach.

The 1 CSG/DE organization operates a twenty four hour service call desk to receive reports for required emergency service. Military members who are assigned to the various shops in civil engineering are on call to respond to these emergencies. At Langley, the emergency calls within MFH average two calls per day, and two hours per call (Hale, 1991) Additionally, enlisted members in the grade of Senior Airman (E-4) and Sergeant (E-5) are the ones who respond and perform the work (Hale, 1991). The annual manpower cost for this service is calculated based on the hourly Military Pay Rates listed in Attachment 20 to AFR 173-13. Using these rates instead of average shop rates provided a more exact representation of the cost attributable to MFH.

Entomology services to MFH provided by military manpower are directly accounted for in an annual work order maintained by the BCE. Two separate reports list the services provided to MFH on the main base, and in Bethel Manor. Each lists both the civilian and military man-hours completed. The reports do not indicate the grade of the military member performing the work. It is typical in the entomology shop at Langley, that this type of service is provided by junior enlisted members, so the costs are determined based on a representative rank of E-4 using the military pay rates mentioned above.

Capital Improvement Costs. Military Family Housing capital improvements are funded through a variety of separate appropriations. The P-711 appropriation covers new housing construction. The P-713 appropriation, Post Acquisition Improvement Program (PAIP), provides for the major renovation of existing units. The P-714 appropriation provides all planning and design funds associated with the PAIP. The funds for Langley within these appropriations were identified in chapter four. Recently, Langley has received two projects funded through the PAIP, one in FY 89, the other in FY 91. The construction phase of the FY 89 project spanned three years, and the FY 91 project is expected to do the same. These projects effectively represent the PAIP expenditures for six fiscal years. The total expense for both projects

was averaged over the terms of construction to derive the annual cost.

Calculation of potential BAQ/VHA income. The potential income from BAQ and VHA is based on the equivalent amount of these allowances forfeited by the Langley MFH residents. The calculation of this potential income was based on an occupant report from the Langley AFB Housing Management Office dated 11 Nov 1990. The information from this listing pertaining to occupant grade and occupancy status was extrapolated and used to create data included in the appendices. The housing assets were listed by: facility number, unit designator, occupant grade, and the occupants entitled BAQ and VHA based on FY 90 rates. This data was broken down by MFH community and officer or enlisted occupants. The distinctions were: Main Base - Officer, Main Base - Enlisted, Bayview Towers - Enlisted, Bethel Manor - Officer, and Bethel Manor - Enlisted.

The unit designators identify the availability of the unit to particular military grades. In some cases the actual occupant's grade does not correspond to the unit designator, such as the case where an E-7 was occupying a unit designated for junior enlisted. The BAQ and VHA rates were based on actual occupancy, not unit designators.

The Basic Allowance for Quarters and Variable Housing Allowance rates were separately identified then totalled

for each unit. The total for each allowance was calculated for each group. These totals appear in chapter four.

One hundred percent occupancy in MFH is highly unlikely on a continual basis. According to the Langley Housing Maintenance Office the occupancy rate for FY 90 was 99.2% (Hale, 1991). The calculation of potential income accounts for this by indicating a zero income for those units unoccupied at the time of the report. At the time of the report the occupancy rate was 97%. Because the FY 90 occupancy rate mentioned above was an annual average, this research was based on the actual data. For the purposes of this research, the actual data provided a conservative estimate of potential income, and avoided misconceptions associated with the higher occupancy rate.

Feasibility Analysis The direct, indirect and capital improvement costs outlined above were combined to determine the actual cost of operating the Langley AFB MFH complex for FY 90. The actual BAQ and VHA forfeited by the occupants of the MFH at Langley during FY 90 were totalled. The costs and potential income were compared using overall and per unit calculations.

Generalizability Analysis To determine if the results of this research could be used to make inferences about other USAF installations, it was essential to determine whether or not Langley was representative of the average USAF

installation. To make this determination the descriptive data from Langley AFB was compared to USAF average data provided by HQ USAF, Family Housing Management Directorate (HQ USAF/CEH), using four indicators. The indicators were: annual cost of operation and maintenance per unit, occupancy distribution by grade, physical age of housing inventory, and number of units supported.

IV. FINDINGS

The actual fiscal year 1990 costs for Langley AFB's MFH operation were compared to the potential income from occupant BAQ and VHA forfeitures for the same fiscal year. This comparison between actual costs and potential income determined whether or not Langley AFB could sustain its MFH operation if operated as a business enterprise.

Specific indicators from the Langley AFB data were compared to the averages from all other stateside US Air Force installations to determine if the findings of this research can be generalized for the rest of the Air Force.

Langley AFB FY 90 Military Family Housing Costs The following cost report is broken down into three primary sections: direct costs, capital improvements costs and indirect costs. The section description is followed by a table listing the costs. The direct cost section includes additional detail to identify the housing management costs including staffing details, and housing operations and maintenance costs by program element. The capital improvements section lists funds authorized under the Post Acquisition Improvement Program (PAIP), Langley's only capital improvements expenditures over the past three fiscal years. The indirect cost section lists estimates of costs attributable to the MFH operation that are not

directly accounted for through MFH appropriations as previously detailed.

Direct Costs. The direct costs are listed by program element (PE) in Table 1. These costs include; administrative costs of operating the military family housing management office (PE 72110), municipal services costs (PE 72120), costs of government owned furnishings (PE 72140), utility costs (PE 72811) and maintenance and repair costs for all buildings, roads, utility systems and grounds within the MFH community (PE 722XX). Cost break-out data within each program element is included at Appendix F.

TABLE 1
FY 90 MFH DIRECT COSTS FOR LANGLEY AFB

PROGRAM ELEMENT	FY 90 EXPENSE (\$000)
72110	341.6
72120	219.2
72140	222.7
72811	2,712.6
722XX	3,493.3
Total	\$ 6,989.4

Source: 1 CSG/DEU

Indirect Costs. Indirect costs represent the costs attributable to MFH at Langley AFB which were not directly accountable. The total costs for each area of support are

identified in Table 2, details for each of the totals are presented in Appendix F.

TABLE 2
FY 90 MFH INDIRECT COSTS FOR LANGLEY AFB

<u>SUPPORT PROVIDED</u>	<u>FY 90 EXPENSE (\$000)</u>
Security Police	857.3
Fire Department	151.6
Public Utility	247.3
Military Manpower	32.6
Total	\$ 1,288.8

Source: 1 CSG/DEU/DEF

The determination of these costs was the only aspect of this research where actual expenditures attributable to MFH were not totally available. However, the estimation of the indirect costs founded on factual data as explained in chapter three. The primary estimation for indirect cost came in inferring the per unit cost identified for Bethel Manor to the remaining 23% of MFH units located on the main base. Although the cost identified is in fact an estimate, this method of interpretation provided a number which appeared intuitively reasonable. For an error in this estimate to adversely affect the outcome of this research it would have to deviate from the actual by a substantial order of magnitude. The estimation of indirect costs

represented only 2% of the total FY 90 cost of MFH operation at Langley. Therefore, for the purposes of this research, the estimation of overhead costs using data from Bethel Manor only is supportable and valid, if not extremely conservative.

Capital Improvement Costs. Capital improvement expenditures at Langley AFB are restricted to those appropriated by Congress under the Post Acquisition Improvement Program (PAIP). Since FY 89 only two PAIP projects have been appropriated. The first was appropriated in FY 89 for \$ 4,118,000, and took three years to complete. The second was appropriated in FY 91 for \$ 4,765,500, and is scheduled to take three years to complete.

To develop and annual costs associated with capital improvements, the total appropriated amount from both projects was summed and divided by the combined construction period, six years. The total annual capital improvements cost is \$ 1,480,700.

Langley AFB Potential Income From BAQ and VHA Table three is a summary of the listings at Appendices A-E.

The monthly forfeiture from Table 3 yields a total potential BAQ/VHA income per year equal to \$ 10,448,500. Based on the total number of units (1621), the average annual income per unit is \$ 6,445,700, or \$ 537.14 per unit per month.

TABLE 3

BAQ AND VHA FORFEITED BY LANGLEY MFH RESIDENTS IN FY 90

<u>MFH Quarters</u>	<u>Forfeiture(\$000)/Mo</u>
Main Base - Enlisted Quarters	65.9
Main Base - Officer Quarters	74.9
Bayview Towers - Enlisted Quarters	39.7
Bethel Manor - Enlisted Quarters	522.7
Bethel Manor - Officer Quarters	167.3
Total BAQ/VHA Forfeiture per month	\$ 870.7
Source: 1 CSG/DEH	

Feasibility Analysis The direct comparison between monthly cost per unit and average monthly income per unit, shown in Table 4, confirmed the feasibility of this concept at Langley AFB.

These figures clearly indicate that Langley AFB could operate and maintain its MFH operation at a level consistent with current funding levels if the source of funding was the forfeited BAQ and VHA from its residents. In fact, BAQ and VHA equivalent forfeitures for FY 90 exceeded the actual expenditures by 7%. It is important to understand that this study does not make the determination of the adequacy of the current funding levels.

It must be noted that this data is based on fiscal year 1990 data. The reason this is important is that annual increases to BAQ and VHA have not kept pace with annual inflation. It is obvious however that costs to

TABLE 4
LANGLEY AFB MFH FEASIBILITY ANALYSIS

<u>FINANCIAL DATA</u>	<u>ANNUAL COST/INCOME (\$000)</u>
Total Direct Costs	6,989.4
Total Indirect Costs	1,288.8
Total Capital Improvements Costs	1,480.7
Total costs	9,758.9
Total BAQ/VHA Forfeiture	10,448.5
Cost vs. Income Differential	\$ + 689.6

operate and maintain these units has kept pace with inflation, if not surpassed it. At this time it appears totally feasible that the Langley AFB MFH complex could be maintained *status quo* if operated as a business enterprise. However, future inflation or changes in USAF funding levels could affect the outcome of this study either way. Yet, if increases to BAQ and VHA do match inflation and no drastic funding changes occur, the findings herein will remain valid.

Generalizability Analysis The findings of this study can not be generalized to any other USAF installation unless the data collected at Langley is representative for other installations. It is unlikely that any two installations will perfectly match one another. Therefore, the

establishment of a definitive norm will allow other installations to be compared against that norm and the conclusions of this study adjusted accordingly.

The descriptive data found at Langley was compared against detailed data for all USAF installations maintained by HQ USAF/CEH based on four indicators. The indicators were: annual costs of operation and maintenance per unit, occupancy distribution by grade, physical age of housing inventory and number of units supported. Comparison between Langley AFB and the USAF average was completed in four sections, each addressing a specific indicator.

Annual O&M Cost per unit. The report maintained by HQ USAF/CEH listing all costs associated with USAF FY 90 MFH (Table 5) does not break out costs by expense element as previously presented. Although the level of detail does not permit comparison by program element, the main headings explain the accounts sufficiently enough to relate them to the costs for Langley. Statements about the data were based on a total cost comparison.

During fiscal year 1990 there were an average of 239,776 units maintained in the USAF inventory and supported by the expenditures listed in Table 5 (HQ USAF/CEH, 1991). This equates to an average, annual, per unit, expense of \$ 5,575.00.

The data maintained by HQ USAF/CEH does not account for any of the indirect costs previously identified. To

TABLE 5

FY 90 USAF MILITARY FAMILY HOUSING COSTS

<u>COST AREAS</u>	<u>FY 90 EXPENSE (\$K)</u>
New Construction	\$ 0.0
Capital Improvements	\$ 119,693.0
Operations	\$ 117,795.0
Utilities	\$ 226,667.0
Real Property Maintenance	\$ 189,082.0
Real Property Minor Construction	\$ 126,030.0
Total	\$ 779,267.0
Source: HQ USAF/CEH	

compare the average annual cost of Langley AFB to the USAF average, all indirect costs were removed from the cost equation. The modified annual costs for MFH at Langley AFB therefore reflects the same costs listed in the seven cost areas of table 5. The modified annual cost per unit for Langley AFB MFH in FY 90 was \$ 5,247.00. The annual expenditures per unit at Langley AFB for operations and maintenance were \$ 328.00 below the USAF average.

During fiscal year 1990 the Langley AFB MFH costs were almost 6% less than the USAF average. In this study, the 6% differential would only be considered substantial if Langley had spent more than the USAF average, not less.

USAF MFH Occupancy. Figures 4 and 5 illustrate the MFH occupant distribution by grade for both the USAF and Langley AFB. According to HQ USAF/CEH, occupant

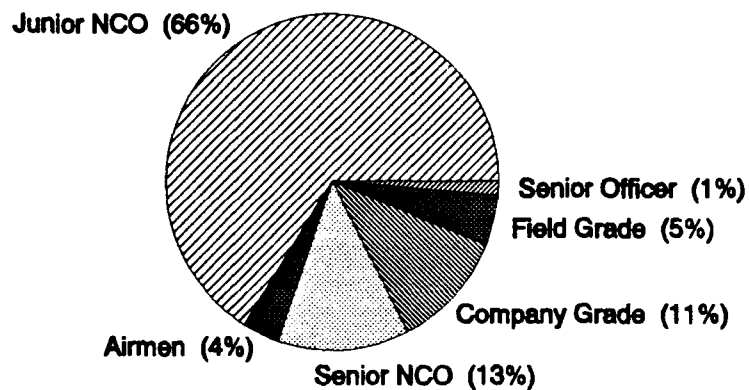


Figure 4. USAF Average MFH Occupant Distribution by Grade (HQ USAF/CEH)

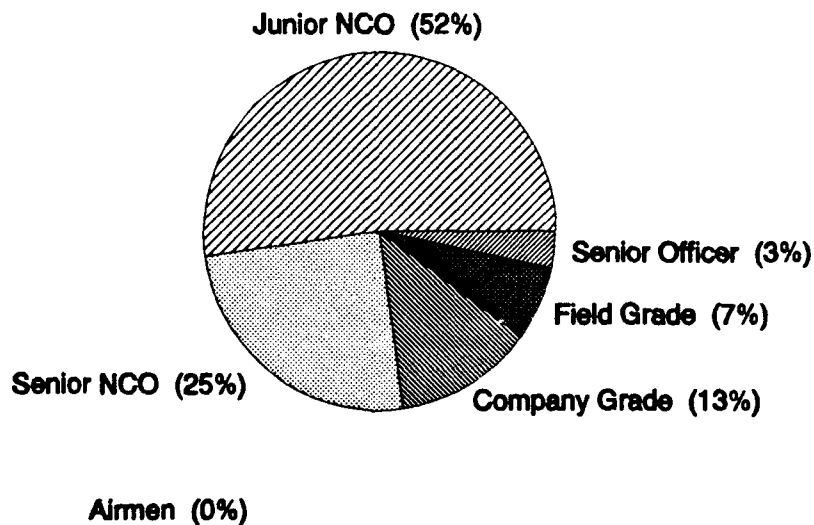


Figure 5. Langley AFB Occupant Distribution by Grade (1 CSG/DEH)

distribution by grade in MFH is the most constant condition across the USAF. The distribution of occupancy by grade across the USAF differs very little from the USAF norm. Junior enlisted members, grades E-4 to E-7 occupy well over half of all MFH units in the inventory (HQ USAF/CEH, 1991). These figures indicate that Langley AFB does not conform to the USAF average occupancies by grade. In fact Langley maintains a higher percentage of upper ranking military members in their MFH. This is understandable due to the fact that Langley AFB is the home of the Tactical Air Command headquarters, and therefore many more senior enlisted members and officers are permanently assigned there. In particular there are fifty three colonels residing in base housing at Langley, more than three times the USAF average. This distribution indicates that Langley is capable of generating significantly more income from forfeited BAQ and VHA than the average installation.

Physical Age of Housing Inventory. The USAF MFH inventory is vast, including over 139,000 units built between the years 1800 and 1989. The average age of USAF housing is currently 29.9 years (HQ USAF/CEH:1991). The average age of the MFH units is important when considering the capital improvement requirements. Bases with MFH units significantly older than average would obviously require more funding through the capital improvements programs to bring their units up to industry standards, assuming that

they had not previously received adequate funding to complete required upgrades.

Langley AFB MFH units were constructed between 1921 and 1966. The majority of the housing is located off base in Bethel Manor, a community developed under the Capehart construction program. The units in Bethel Manor were constructed in three phases completed in 1960, 1966 and 1976. The average age of the 1621 units is 28.8 years, just below the USAF average. This differential is not significant enough to effect Langley's generalizability.

Number of Units Supported. The data compiled for Langley AFB in this study show 1621 units in their inventory. HQ USAF/CEH maintains a listing of all USAF maintained housing at all locations. This includes many small installations which maintain fewer than 10 MFH units. These small installations were omitted from the calculation of the USAF average number of units per installation. The average was calculated based on major installations within the contiguous United States. The average number of units supported by these major installations is 1217.

Langley's MFH inventory is 33% larger than the average USAF installation. This size differential is significant because it relates directly to Langley's capability to generate significantly more income from BAQ and VHA forfeiture than the average USAF installation.

Overall, the Langley AFB MFH operation is not far from USAF averages. However, the areas in which they differ are the areas most critical to the outcome of this study. How Langley compares based on the occupancy by grade and number of units is critical since that is the determinator of the potential income.

For both indicators, Langley is significantly above the USAF average. Resulting in a capability to generate a substantially higher income from its BAQ and VHA. Differences in occupant rank structure and number of units supported could make the difference in determining whether or not the business enterprise proposal is feasible at other installations.

V. Conclusions & Recommendations

This research had two objectives. The first was to determine if the Langley AFB Military Family Housing operation could sustain itself based on funding equal to the Basic Allowance for Quarters and Variable Housing Allowance forfeited by its residents. The second objective was to determine if Langley AFB was truly representative of the average USAF installation.

Defense Management Review initiatives pertaining to the business enterprise management approach showed the development of the concept and the requirements for it to be self sustaining. While the management concepts may be changing, recent MFH appropriations and Congressional testimony showed that senior USAF leaders are committed to providing quality MFH for military members without making them face additional out of pocket expenses. The housing allowance concept is supported by these leaders as well as the civilian sector as an outstanding method for providing necessary housing. The development and intent of these allowances shows that they are intended to cover only 85% of the members actual housing expenditures.

The analysis of the first objective was based on the actual expenditures within Langley AFB's MFH program for fiscal year 1990 and the actual occupancy of the MFH units at a point in time during the fiscal year. The expenditures were identified in three categories: direct,

capital improvement, and indirect costs. These expenditures were compared to the income potentially generated from collection of BAQ and VHA from the Langley AFB MFH occupants.

The second objective involved a comparison of the descriptive data from the Langley MFH operation to overall USAF averages based on four indicators.

Conclusions

First Objective. This research clearly indicated that Langley AFB could sustain its MFH operation *status quo* based on BAQ and VHA rental income. The analysis of the costs described showed that if Langley AFB had received funding equal to the BAQ and VHA forfeited by its residents, it would have received over \$ 689.0 K more than it actually spent. The research showed that BAQ and VHA forfeited on a monthly basis actually exceeded monthly expenditures by more than \$ 35.00 per unit.

Second Objective. Langley is not indicative of the average USAF installation as shown by a direct comparison between the cost and occupant data for Langley AFB and the USAF averages. In the comparison of annual cost and average age of inventory, Langley was relatively close to the USAF average. However, in the area of potential income defined by occupancy distribution and number of units, Langley was much different than the USAF average.

The distributions presented in Figures 4 and 5 coupled with the fact that Langley maintains a housing inventory 33% larger than the USAF average, clearly showed that Langley AFB has the potential to generate substantially more income from BAQ and VHA forfeitures than the average USAF installation.

The data from Langley may be descriptive of other installations hosting MAJOR commands as tenants which have elevated rank structures in MFH. Additional research is required based on the parameters established in this study to determine if the conclusions of this study could be generalized to these, or any other installations. The findings do suggest that the concepts outlined by DMRD #966 and DBOF are conceptually feasible. Follow on research of additional installations which paralleled this study is required to determine the USAF wide feasibility of this initiative.

Summary This research demonstrated that operating Military Family Housing on an income basis, (as a business enterprise), without enforcing any additional financial obligations on the occupants, is feasible at Langley AFB. However, this research does not determine whether or not this level of funding is sufficient to overcome any MFH backlog of maintenance and repair or provide upgrades to current quality standards.

The data analyzed for Langley AFB was researched and presented in detail to ensure that all costs were included in the analysis. The estimation of indirect costs within this analysis represent only 2% of the total costs identified for the Langley MFH operation in FY 90. The procedure for making the estimates used is conservative and based on factual data justified on a per unit basis. Any inaccuracies in these estimates of indirect costs are minor and could not possibly amount to the \$ 689,600.00 per year required to invalidate the findings.

As stated earlier, Langley's annual cost per unit is actually less than the USAF average. One explanation for this may be that Langley AFB is located in a relatively temperate climatic region. Utility usage for heating and cooling are more stable than at installations located in extreme climates. Lower utility use results in a lower cost of operation.

The number of units and occupant distribution by grade are the two indicators which have the greatest financial impact based on the parameters of this study. Comparison to Langley AFB based on these indicators will provide an initial indication of whether or not the conclusions of this research could be generalized to any other installation. These types of comparisons could be easily accomplished and would provide other installations an

initial indication as to the feasibility of the business enterprise approach to MFH management.

Recommendations The methodology followed by this study presents a clear outline of a way to determine the feasibility of self sustained operation. This research presented a model that could be applied to any USAF or DoD installation to evaluate the implications of the DMRD and DBOF initiatives.

Cost allocations and potential income are easily calculated at any installation using the same accounting procedures as Langley AFB. If the USAF and DoD wish to make a clear determination of the feasibility of these initiatives a census of each installation could be performed based on a research guide, similar to chapter four, to identify actual conditions at each installation. The findings from each installation could be tabulated at MAJCOM level and forwarded to HQ USAF for presentation to the Secretary of the Air Force and or the Secretary of Defense. This study has provided the framework and answered all the general questions necessary to make this a relatively simple task. Other DoD agencies could adapt this format to their own MFH accounting principles and complete similar studies on their installations.

Answering the financial feasibility question does not address the overall consequences of implementing business enterprise management. The findings of this study must be

coupled with a detailed reviewed of MFH management and MFH occupant needs to understand the requirements for implementation. Management of MFH assets under this concept could drive lower enlisted members out of MFH, in an attempt to increase the annual funding in proportion to actual occupancy. Such actions violate the principle of providing housing to the military members who need it most.

The housing allowance forfeitures at Langley could generate sufficient funding to operate and maintain the MFH complex. Under a business enterprise operation, local accounts and procedures would have to be established to manage rental income whether it came directly from the occupant or was simply transferred through military pay accounts. The efficiency of the operation would be based on the rigor and control of the local accounts. Commanders would undoubtedly have more flexibility to respond to local needs, but they would also have a much greater challenge in appropriately allocating the funds. Presently there are numerous levels of checks and balances on the MFH program. Although some may be lost, this type of funding can be efficiently managed, as shown by the industrial funding accounts managed by the Military Airlift Command and Air Force Logistics Command. The current Housing Management Office would have to be restructured. Management of the collection, programming and expenditure of the MFH accounts would require dedicated attention and extensive training.

These changes to the existing system could drastically impact the efficiency of the MFH operation, either positively or negatively and must be specifically addressed prior to implementation of such an initiative.

I am confident in the findings and conclusions of this research. The organizational management concepts required for total implementation of this initiative must be studied. In the interim, the Langley AFB MFH operation should be identified as a test location and funded based on the equivalent BAQ and VHA forfeited by its occupants for a period of one year.

Follow-on Research Follow-on research is required in two primary areas to make this study complete. First, an analysis of additional USAF and/or DoD installations based on the format of this study will provide the case studies required to allow generalization of the findings.

Second, a detailed look at how the MFH operation would be set-up at a base level as a business enterprise. The primary focus would be to assume operation as described in this research and determine an organizational structure, policies and procedures which would ensure efficient and effective operation of MFH as a business enterprise.

VI. Supporting Data

The following appendices contain the data upon which the findings of this research were based. Appendices A through E use acronyms to describe the specific data about the MFH occupants at Langley AFB. Table 6 defines the acronyms used throughout the appendices.

TABLE 6
LEGEND OF ACRONYMS USED IN APPENDICES

Unit Designators

SO	Senior Officer
FG	Field Grade Officer
CG	Company Grade Officer
SE	Senior Enlisted
JE	Junior Enlisted

Officer Grades

6	Colonel
5	Lt Colonel
4	Major
3	Captain
2	1st Lieutenant
1	2nd Lieutenant

Enlisted Grades

9	Chief Master Sergeant
8	Senior Master Sergeant
7	Master Sergeant
6	Technical Sergeant
5	Staff Sergeant
4	Sergeant/Senior Airman

Appendix A: MFH Assets, Main Base - Officer

Facility Number	Unit Desig	Officer Grade	BAQ/ month(\$)	VHA/ month(\$)	Total Allowance	
691	A	FG	5	678.60	107.82	786.42
691	B	FG	4	598.50	148.90	747.40
690	A	FG	5	678.60	107.82	786.42
690	B	FG	5	678.60	107.82	786.42
689	A	FG	4	598.50	148.90	747.40
689	B	FG	4	598.50	148.90	747.40
688	A	FG	4	598.50	148.90	747.40
688	B	FG	4	598.50	148.90	747.40
537	A	FG	4	598.50	148.90	747.40
537	B	FG	4	598.50	148.90	747.40
538	A	FG	4	598.50	148.90	747.40
538	B	FG	4	598.50	148.90	678.60
536	A	FG	5	678.60	107.82	786.42
536	B	FG	4	598.50	148.90	747.40
539	A	FG		0.00	0.00	0.00
539	B	FG	4	598.50	148.90	747.40
535	A	FG	5	678.60	107.82	786.42
535	B	FG	5	678.60	107.82	786.42
541	A	FG	5	678.60	107.82	786.42
541	B	FG	4	598.50	148.90	747.40
534	A	FG	4	598.50	148.90	747.40
534	B	FG	4	598.50	148.90	747.40
542	A	FG	5	678.60	107.82	786.42
542	B	FG	5	678.60	107.82	786.42
533	A	FG	5	678.60	107.82	786.42
533	B	FG	4	598.50	148.90	747.40
524	A	FG	4	598.50	148.90	747.40
524	B	FG	4	598.50	148.90	747.40
532	A	FG	5	678.60	107.82	786.42
532	B	FG	4	598.50	148.90	747.40
525	A	FG	5	678.60	107.82	786.42
525	B	FG	4	598.50	148.90	747.40
531	A	FG	5	678.60	107.82	786.42
531	B	FG	5	678.60	107.82	786.42
526	A	FG	4	598.50	148.90	747.40
526	B	FG	4	598.50	148.90	747.40
530	A	FG		0.00	0.00	0.00
530	B	FG		0.00	0.00	0.00
527	A	FG	5	678.60	107.82	786.42
527	B	FG	5	678.60	107.82	786.42
461	A	CG	3	495.30	123.03	618.33
461	B	CG	3	495.30	123.03	618.33
460	A	CG	3	495.30	123.03	618.33
460	B	CG	2	422.70	130.14	552.84
462	A	CG		0.00	0.00	0.00
462	B	CG		0.00	0.00	0.00

Facility Number		Unit Desig	Officer Grade	BAQ/ month(\$)	VHA/ month(\$)	Total Allowance
458	A	CG	3	495.30	123.03	618.33
458	B	CG	2	422.70	130.14	552.84
456	A	CG	3	495.30	123.03	618.33
456	B	CG		0.00	0.00	0.00
455	A	CG	2	422.70	130.14	552.84
455	B	CG	2	422.70	130.14	552.84
445	A	SO	6	704.40	92.28	796.68
445	B	SO	6	704.40	92.28	796.68
446	A	SO	6	704.40	92.28	796.68
446	B	SO	6	704.40	92.28	796.68
447		SO	6	704.40	92.28	796.68
449	A	SO	6	704.40	92.28	796.68
449	B	SO	6	704.40	92.28	796.68
450	A	SO	6	704.40	92.28	796.68
450	B	SO	6	704.40	92.28	796.68
454	A	SO	6	704.40	92.28	796.68
454	B	SO	6	704.40	92.28	796.68
453	A	SO	6	704.40	92.28	796.68
453	B	SO	6	704.40	92.28	796.68
452	A	SO	6	704.40	92.28	796.68
452	B	SO	6	704.40	92.28	796.68
451		SO	6	704.40	92.28	796.68
510	A	SO	6	704.40	92.28	796.68
510	B	SO	6	704.40	92.28	796.68
508	A	SO	6	704.40	92.28	796.68
508	B	SO	6	704.40	92.28	796.68
502	A	SO	6	704.40	92.28	796.68
502	B	SO	6	704.40	92.28	796.68
503		SO	6	704.40	92.28	796.68
504	A	SO	6	704.40	92.28	796.68
504	B	SO	6	704.40	92.28	796.68
505	A	SO	6	704.40	92.28	796.68
505	B	SO	6	704.40	92.28	796.68
507	A	SO	6	704.40	92.28	796.68
507	B	SO	6	704.40	92.28	796.68
506		SO	6	704.40	92.28	796.68
514		SO	6	704.40	92.28	796.68
513	A	SO	6	704.40	92.28	796.68
513	B	SO	6	704.40	92.28	796.68
512	A	SO	6	704.40	92.28	796.68
512	B	SO	6	704.40	92.28	796.68
551	A	SO	6	704.40	92.28	796.68
551	B	SO	6	704.40	92.28	796.68
423	A	SO	6	704.40	92.28	796.68
423	B	SO	6	704.40	92.28	796.68
429	A	SO	6	704.40	92.28	796.68
429	B	SO	6	704.40	92.28	796.68
431	A	SO	6	704.40	92.28	796.68
431	B	SO	6	704.40	92.28	796.68

Facility Number	Unit Desig	Officer Grade	BAQ/ month	VHA/ month	Total Allowance
434	SO	6	704.40	92.28	796.68
435 A	SO	6	704.40	92.28	796.68
435 B	SO	6	704.40	92.28	796.68
436 A	SO	6	704.40	92.28	796.68
436 B	SO	6	704.40	92.28	796.68
430 A	SO	6	704.40	92.28	796.68
430 B	SO	6	704.40	92.28	796.68
428 A	SO	6	704.40	92.28	796.68
428 B	SO	6	704.40	92.28	796.68

Main Base - Officer Total \$ 74,939.69

Appendix B: MFH Assets, Main Base - Enlisted

Facility Number	Unit Desig	Enlisted Grade	BAQ/ month(\$)	VHA/ month(\$)	Total Allowance
949	SE	7	435.30	134.54	569.84
948	SE	8	468.30	167.02	635.32
868	SE	7	435.30	134.54	569.84
869	SE	9	508.20	157.13	665.33
857 A	SE	7	435.30	134.54	569.84
857 B	SE	7	435.30	134.54	569.84
856 A	SE	9	508.20	157.13	665.33
856 B	SE	7	435.30	134.54	569.84
854 A	SE	7	435.30	134.54	569.84
854 B	SE	8	468.30	167.02	635.32
852 A	SE	7	435.30	134.54	569.84
852 B	SE	7	435.30	134.54	569.84
851 A	SE	7	435.30	134.54	569.84
851 B	SE	7	435.30	134.54	569.84
849 A	SE	7	435.30	134.54	569.84
849 B	SE	7	435.30	134.54	569.84
848 A	SE	7	435.30	134.54	569.84
848 B	SE	7	435.30	134.54	569.84
818 A	SE	7	435.30	134.54	569.84
818 B	SE	7	435.30	134.54	569.84
845 A	SE	7	435.30	134.54	569.84
845 B	SE	9	508.20	157.13	665.33
843 A	SE		0.00	0.00	0.00
843 B	SE	7	435.30	134.54	569.84
842 A	SE	6	402.00	123.84	525.84
842 B	SE	7	435.30	134.54	569.84
840 A	SE	7	435.30	134.54	569.84
840 B	SE	7	435.30	134.54	569.84
838 A	SE	7	435.30	134.54	569.84
838 B	SE	7	435.30	134.54	569.84
835 A	SE	8	468.30	167.02	635.32
835 B	SE	9	508.20	157.13	665.33
833 A	SE	7	435.30	134.54	569.84
833 B	SE	7	435.30	134.54	569.84
831 A	SE	7	435.30	134.54	569.84
831 B	SE	7	435.30	134.54	569.84
882 A	SE	7	435.30	134.54	569.84
882 B	SE	8	468.30	167.02	635.32
881 A	SE	7	435.30	134.54	569.84
881 B	SE	9	508.20	157.13	665.33
878 A	SE	7	435.30	134.54	569.84
878 B	SE	7	435.30	134.54	569.84
876 A	SE	7	435.30	134.54	569.84
876 B	SE	6	402.00	123.84	525.84
875 A	SE	7	435.30	134.54	569.84
875 B	SE	7	435.30	134.54	569.84

Facility Number	Unit Desig	Enlisted Grade	BAQ/ month(\$)	VHA/ month(\$)	Total Allowance	
874	A	SE	7	435.30	134.54	569.84
874	B	SE	7	435.30	134.54	569.84
873	A	SE	9	508.20	157.13	665.33
873	B	SE	9	508.20	157.13	665.33
830	A	SE	7	435.30	134.54	569.84
830	B	SE	7	435.30	134.54	569.84
829	A	SE	7	435.30	134.54	569.84
829	B	SE	8	468.30	167.02	635.32
827	A	SE	8	468.30	167.02	635.32
827	B	SE	7	435.30	134.54	569.84
826	A	SE	7	435.30	134.54	569.84
826	B	SE	7	435.30	134.54	569.84
825	A	SE	7	435.30	134.54	569.84
825	B	SE	8	468.30	167.02	635.32
823	A	SE	7	435.30	134.54	569.84
823	B	SE		0.00	0.00	0.00
821	A	SE	7	435.30	134.54	569.84
821	B	SE	9	508.20	157.13	665.33
820	A	SE	8	468.30	167.02	635.32
820	B	SE	7	435.30	134.54	569.84
816	A	SE	8	468.30	167.02	635.32
816	B	SE	9	508.20	157.13	665.33
815	A	SE		0.00	0.00	0.00
815	B	SE		0.00	0.00	0.00
819	A	SE	8	468.30	167.02	635.32
819	B	SE		0.00	0.00	0.00
809	A	SE	9	508.20	157.13	665.33
809	B	SE	6	402.00	123.84	525.84
808	A	SE	7	435.30	134.54	569.84
808	B	SE	7	435.30	134.54	569.84
807	A	SE	7	435.30	134.54	569.84
807	B	SE	9	508.20	157.13	665.33
806	A	SE	9	508.20	157.13	665.33
806	B	SE	7	435.30	134.54	569.84
805	A	SE	7	435.30	134.54	569.84
805	B	SE		0.00	0.00	0.00
804	A	SE	8	468.30	167.02	635.32
804	B	SE	7	435.30	134.54	569.84
950	A	SE	7	435.30	134.54	569.84
950	B	SE	6	402.00	123.84	525.84
951	A	SE	8	468.30	167.02	635.32
951	B	SE	7	435.30	134.54	569.84
956	A	SE	8	468.30	167.02	635.32
956	B	SE	7	435.30	134.54	569.84
957	A	SE	6	402.00	123.84	525.84
957	B	SE	9	508.20	157.13	665.33
960	A	SE		0.00	0.00	0.00
960	B	SE		0.00	0.00	0.00
969	A	SE	7	435.30	134.54	569.84

Facility Number	Unit Desig	Enlisted Grade	BAQ/ month(\$)	VHA/ month(\$)	Total Allowance	
969	B	SE	7	435.30	134.54	569.84
971	A	SE	8	468.30	167.02	635.32
971	B	SE	8	468.30	167.02	635.32
974	A	SE	9	508.20	157.13	665.33
974	B	SE	9	508.20	157.13	665.33
975	A	SE		0.00	0.00	0.00
975	B	SE		0.00	0.00	0.00
976	A	SE	9	508.20	157.13	665.33
976	B	SE	9	508.20	157.13	665.33
980	A	SE	9	508.20	157.13	665.33
980	B	SE	9	508.20	157.13	665.33
982	A	SE		0.00	0.00	0.00
982	B	SE		0.00	0.00	0.00
983	A	SE	6	402.00	123.84	525.84
983	B	SE	7	435.30	134.54	569.84
986	A	SE	8	468.30	167.02	635.32
986	B	SE	8	468.30	167.02	635.32
985	A	SE	9	508.20	157.13	665.33
985	B	SE	9	508.20	157.13	665.33
987	A	SE	7	435.30	134.54	569.84
987	B	SE	9	508.20	157.13	665.33
988	A	SE		0.00	0.00	0.00
988	B	SE		0.00	0.00	0.00
989	A	SE	8	468.30	167.02	635.32
989	B	SE	8	468.30	167.02	635.32
991	A	SE	7	435.30	134.54	569.84
991	B	SE	8	468.30	167.02	635.32
995	A	SE		0.00	0.00	0.00
995	B	SE		0.00	0.00	0.00
997	A	SE	8	468.30	167.02	635.32
997	B	SE	8	468.30	167.02	635.32

Main Base Enlisted Total \$ 65,959.74

Appendix C: MFH Assets, Main Base - Bayview Towers

Facility Number	Unit Desig	Enlisted Grade	BAQ/ month(\$)	VHA/ month(\$)	Total Allowance
945 2A	JE	5	361.50	118.76	480.26
945 2B	JE	5	361.50	118.76	480.26
945 2C	JE	5	361.50	118.76	480.26
945 2D	JE	6	402.00	123.84	525.84
945 2E	JE	4	314.40	98.83	413.23
945 2F	JE	5	361.50	118.76	480.26
945 2G	JE	5	361.50	118.76	480.26
945 2H	JE	5	361.50	118.76	480.26
945 2I	JE	4	314.40	98.83	413.23
945 2J	JE	4	314.40	98.83	413.23
945 3A	JE	5	361.50	118.76	480.26
945 3B	JE	5	361.50	118.76	480.26
945 3C	JE	4	314.40	98.83	413.23
945 3D	JE	4	314.40	98.83	413.23
945 3E	JE	4	314.40	98.83	413.23
945 3F	JE	4	314.40	98.83	413.23
945 3G	JE	5	361.50	118.76	480.26
945 3H	JE	5	361.50	118.76	480.26
945 3I	JE	5	361.50	118.76	480.26
945 3J	JE	5	361.50	118.76	480.26
945 4A	JE	6	402.00	123.84	525.84
945 4B	JE		0.00	0.00	0.00
945 4C	JE	4	314.40	98.83	413.23
945 4D	JE	5	361.50	118.76	480.26
945 4E	JE	4	314.40	98.83	413.23
945 4F	JE	4	314.40	98.83	413.23
945 4G	JE	5	361.50	118.76	480.26
945 4H	JE	5	361.50	118.76	480.26
945 4I	JE	4	314.40	98.83	413.23
945 4J	JE	4	314.40	98.83	413.23
945 5A	JE	5	361.50	118.76	480.26
945 5B	JE	4	314.40	98.83	413.23
945 5C	JE	4	314.40	98.83	413.23
945 5D	JE	4	314.40	98.83	413.23
945 5E	JE	5	361.50	118.76	480.26
945 5F	JE	5	361.50	118.76	480.26
945 5G	JE	5	361.50	118.76	480.26
945 5H	JE	5	361.50	118.76	480.26
945 5I	JE	4	314.40	98.83	413.23
945 5J	JE	4	314.40	98.83	413.23
945 6A	JE	5	361.50	118.76	480.26
945 6B	JE	4	314.40	98.83	413.23
945 6C	JE	4	314.40	98.83	413.23
945 6D	JE	4	314.40	98.83	413.23
945 6E	JE	4	314.40	98.83	413.23
945 6F	JE	4	314.40	98.83	413.23

Facility Number	Unit Desig	Enlisted Grade	BAQ/ month(\$)	VHA/ month(\$)	Total Allowance	
945	6G	JE	4	314.40	98.83	413.23
945	6H	JE	4	314.40	98.83	413.23
945	6I	JE	4	314.40	98.83	413.23
945	6J	JE	5	361.50	118.76	480.26
945	7A	JE	4	314.40	98.83	413.23
945	7B	JE	4	314.40	98.83	413.23
945	7C	JE	5	361.50	118.76	480.26
945	7D	JE	5	361.50	118.76	480.26
945	7E	JE	5	361.50	118.76	480.26
945	7F	JE	4	314.40	98.83	413.23
945	7G	JE	4	314.40	98.83	413.23
945	7H	JE	5	361.50	118.76	480.26
945	7I	JE	5	361.50	118.76	480.26
945	7J	JE	4	314.40	98.83	413.23
945	8A	JE	4	314.40	98.83	413.23
945	8B	JE	5	361.50	118.76	480.26
945	8C	JE	4	314.40	98.83	413.23
945	8D	JE	6	402.00	123.84	525.84
945	8E	JE	4	314.40	98.83	413.23
945	8F	JE	4	314.40	98.83	413.23
945	8G	JE	4	314.40	98.83	413.23
945	8H	JE	5	361.50	118.76	480.26
945	8I	JE	4	314.40	98.83	413.23
945	8J	JE	5	361.50	118.76	480.26
945	9A	JE	4	314.40	98.83	413.23
945	9B	JE	5	361.50	118.76	480.26
945	9C	JE	4	314.40	98.83	413.23
945	9D	JE	4	314.40	98.83	413.23
945	9E	JE	5	361.50	118.76	480.26
945	9F	JE	5	361.50	118.76	480.26
945	9G	JE	5	361.50	118.76	480.26
945	9H	JE	4	314.40	98.83	413.23
945	9I	JE	4	314.40	98.83	413.23
945	9J	JE	4	314.40	98.83	413.23
945	0A	JE	5	361.50	118.76	480.26
945	0B	JE	4	314.40	98.83	413.23
945	0C	JE	5	361.50	118.76	480.26
945	0D	JE	4	314.40	98.83	413.23
945	0E	JE	4	314.40	98.83	413.23
945	0F	JE	5	361.50	118.76	480.26
945	0G	JE	4	314.40	98.83	413.23
945	0H	JE	5	361.50	118.76	480.26
945	0I	JE	4	314.40	98.83	413.23
945	0J	JE	5	361.50	118.76	480.26

Main Base, Bayview Towers Total \$ 39,729.47

Appendix D: MFH Assets, Bethel Manor - Officer

Facility Number	Unit Desig	Officer Grade	BAQ/ month(\$)	VHA/ month(\$)	Total Allowance	
1625	A	CG	3	495.30	123.03	618.33
1625	B	CG	3	495.30	123.03	618.33
1626	A	CG	3	495.30	123.03	618.33
1626	B	CG	3	495.30	123.03	618.33
1627	A	CG	3	495.30	123.03	618.33
1627	B	CG	3	495.30	123.03	618.33
1628		FG	5	678.60	107.82	786.42
1629	A	CG	2	422.70	130.14	552.84
1629	B	CG	3	495.30	123.03	618.33
1630	A	CG	3	495.30	123.03	618.33
1630	B	CG	1	377.70	136.22	513.92
1631		FG	4	598.50	148.90	747.40
1632	A	CG	2	422.70	130.14	552.84
1632	B	CG	3	495.30	123.03	618.33
1633	A	CG	3	495.30	123.03	618.33
1633	B	CG	2	422.70	130.14	552.84
1634	A	CG	3	495.30	123.03	618.33
1634	B	CG	2	422.70	130.14	552.84
1635	A	CG	3	495.30	123.03	618.33
1635	B	CG	1	377.70	136.22	513.92
1636		FG	5	678.60	107.82	786.42
1637		FG	4	598.50	148.90	747.40
1638	A	CG	2	422.70	130.14	552.84
1638	B	CG	3	495.30	123.03	618.33
1639	A	CG	2	422.70	130.14	552.84
1639	B	CG	3	495.30	123.03	618.33
1640		FG	4	598.50	148.90	747.40
1641		FG	4	598.50	148.90	747.40
1642	A	CG	1	377.70	136.22	513.92
1642	B	CG	3	495.30	123.03	618.33
1643	A	CG	3	495.30	123.03	618.33
1643	B	CG	3	495.30	123.03	618.33
1644		FG	4	598.50	148.90	747.40
1645	A	CG	3	495.30	123.03	618.33
1645	B	CG	3	495.30	123.03	618.33
1646	A	CG	3	495.30	123.03	618.33
1646	B	CG	3	495.30	123.03	618.33
1647		FG	4	598.50	148.90	747.40
1648	A	CG	3	495.30	123.03	618.33
1648	B	CG	3	495.30	123.03	618.33
1649		FG	4	598.50	148.90	747.40
1650	A	CG	3	495.30	123.03	618.33
1650	B	CG	2	422.70	130.14	552.84
1651		FG	4	598.50	148.90	747.40
1652		FG	4	598.50	148.90	747.40
1653	A	CG	3	495.30	123.03	618.33

Facility Number		Unit Desig	Officer Grade	BAQ/ month(\$)	VHA/ month(\$)	Total Allowance
1653	B	CG	3	495.30	123.03	618.33
1654	A	CG	2	422.70	130.14	552.84
1654	B	CG	2	422.70	130.14	552.84
1655		FG	4	598.50	148.90	747.40
1656		FG	4	598.50	148.90	747.40
1657	A	CG	2	422.70	130.14	552.84
1657	B	CG	3	495.30	123.03	618.33
1658	A	CG	4	598.50	148.90	747.40
1658	B	CG	3	495.30	123.03	618.33
1659	A	CG	3	495.30	123.03	618.33
1659	B	CG	3	495.30	123.03	618.33
1660		FG	4	598.50	148.90	747.40
1661	A	CG	3	495.30	123.03	618.33
1661	B	CG	3	495.30	123.03	618.33
1662		FG	4	598.50	148.90	747.40
1663	A	CG	1	377.70	136.22	513.92
1663	B	CG	3	495.30	123.03	618.33
1664	A	CG	3	495.30	123.03	618.33
1664	B	CG	3	495.30	123.03	618.33
1665	A	CG	2	422.70	130.14	552.84
1665	B	CG	3	495.30	123.03	618.33
1666	A	CG	3	495.30	123.03	618.33
1666	B	CG	3	495.30	123.03	618.33
1667	A	CG	3	495.30	123.03	618.33
1667	B	CG	3	495.30	123.03	618.33
1668		FG	4	598.50	148.90	747.40
1669		FG	4	598.50	148.90	747.40
1670	A	CG	3	495.30	123.03	618.33
1670	B	CG	1	377.70	136.22	513.92
1671	A	CG	4	598.50	148.90	747.40
1671	B	CG	3	495.30	123.03	618.33
1672	A	CG	4	598.50	148.90	747.40
1672	B	CG	3	495.30	123.03	618.33
1673		FG	5	678.60	107.82	786.42
1674	A	CG	3	495.30	123.03	618.33
1674	B	CG	3	495.30	123.03	618.33
1675	A	CG	4	598.50	148.90	747.40
1675	B	CG	3	495.30	123.03	618.33
1676	A	CG	3	495.30	123.03	618.33
1676	B	CG	3	495.30	123.03	618.33
1677		FG	4	598.50	148.90	747.40
1678		FG	4	598.50	148.90	747.40
1679	A	CG	3	495.30	123.03	618.33
1679	B	CG	3	495.30	123.03	618.33
1680	A	CG	3	495.30	123.03	618.33
1680	B	CG	3	495.30	123.03	618.33
1681	A	CG	3	495.30	123.03	618.33
1681	B	CG	2	422.70	130.14	552.84
1682	A	CG	3	495.30	123.03	618.33

Facility Number	Unit Desig	Officer Grade	BAQ/ month(\$)	VHA/ month(\$)	Total Allowance	
1682	B	CG	3	495.30	123.03	618.33
1683	A	CG	3	495.30	123.03	618.33
1683	B	CG	3	495.30	123.03	618.33
1684		FG	4	598.50	148.90	747.40
1685		FG	4	598.50	148.90	747.40
1686	A	CG	4	598.50	148.90	747.40
1686	B	CG	3	495.30	123.03	618.33
1687	A	CG	3	495.30	123.03	618.33
1687	B	CG	3	495.30	123.03	618.33
1688		FG	4	598.50	148.90	747.40
1689	A	CG	3	495.30	123.03	618.33
1689	B	CG	3	495.30	123.03	618.33
1690	A	CG	3	495.30	123.03	618.33
1690	B	CG	3	495.30	123.03	618.33
1691		FG	4	598.50	148.90	747.40
1692	A	CG	3	495.30	123.03	618.33
1692	B	CG	3	495.30	123.03	618.33
1693	A	CG	3	495.30	123.03	618.33
1693	B	CG	3	495.30	123.03	618.33
1694		FG	5	678.60	107.82	786.42
1695		FG	4	598.50	148.90	747.40
1696	A	CG	2	422.70	130.14	552.84
1696	B	CG	3	495.30	123.03	618.33
1697	A	CG	1	377.70	136.22	513.92
1697	B	CG	2	422.70	130.14	552.84
1698	A	CG	2	422.70	130.14	552.84
1698	B	CG	3	495.30	123.03	618.33
1699	A	CG	2	422.70	130.14	552.84
1699	B	CG	3	495.30	123.03	618.33
1700	A	CG	1	377.70	136.22	513.92
1700	B	CG	3	495.30	123.03	618.33
1701	A	CG	2	422.70	130.14	552.84
1701	B	CG	3	495.30	123.03	618.33
1702	A	CG	3	495.30	123.03	618.33
1702	B	CG	3	495.30	123.03	618.33
1703	A	CG	2	422.70	130.14	552.84
1703	B	CG	3	495.30	123.03	618.33
1704		FG	4	598.50	148.90	747.40
1705		FG	4	598.50	148.90	747.40
1706	A	CG	3	495.30	123.03	618.33
1706	B	CG	3	495.30	123.03	618.33
1707	A	CG		0.00	0.00	0.00
1707	B	CG	3	495.30	123.03	618.33
1708		FG	4	598.50	148.90	747.40
1709	A	CG	3	495.30	123.03	618.33
1709	B	CG	3	495.30	123.03	618.33
1710	A	CG	3	495.30	123.03	618.33
1710	B	CG	3	495.30	123.03	618.33
1711	A	CG	3	495.30	123.03	618.33

Facility Number		Unit Desig	Officer Grade	BAQ/ month(\$)	VHA/ month(\$)	Total Allowance
1711	B	CG	3	495.30	123.03	618.33
1712		FG	4	598.50	148.90	747.40
1713	A	CG	3	495.30	123.03	618.33
1713	B	CG	3	495.30	123.03	618.33
1714	A	CG	3	495.30	123.03	618.33
1714	B	CG	1	377.70	136.22	513.92
1715		FG	2	422.70	130.14	552.84
1716		FG	5	678.60	107.82	786.42
1717	A	CG	3	495.30	123.03	618.33
1717	B	CG	3	495.30	123.03	618.33
1718	A	CG	3	495.30	123.03	618.33
1718	B	CG	3	495.30	123.03	618.33
1719		FG	4	598.50	148.90	747.40
1720		FG	5	678.60	107.82	786.42
1721	A	CG	3	495.30	123.03	618.33
1721	B	CG	1	377.70	136.22	513.92
1722	A	CG	3	495.30	123.03	618.33
1722	B	CG	3	495.30	123.03	618.33
1723	A	CG	3	495.30	123.03	618.33
1723	B	CG	3	495.30	123.03	618.33
1724		FG	5	678.60	107.82	786.42
1725	A	CG	3	495.30	123.03	618.33
1725	B	CG	3	495.30	123.03	618.33
1726		FG	5	678.60	107.82	786.42
1727		FG	4	598.50	148.90	747.40
1728	A	CG	3	495.30	123.03	618.33
1728	B	CG	3	495.30	123.03	618.33
1729	A	CG	3	495.30	123.03	618.33
1729	B	CG	3	495.30	123.03	618.33
1730		FG	4	598.50	148.90	747.40
1731	A	CG	2	422.70	130.14	552.84
1731	E	CG	2	422.70	130.14	552.84
1732		FG	4	598.50	148.90	747.40
1733		FG	4	598.50	148.90	747.40
1734		FG	4	598.50	148.90	747.40
1735	A	CG	2	422.70	130.14	552.84
1735	B	CG	1	377.70	136.22	513.92
1736		FG	5	678.60	107.82	786.42
1737		FG	5	678.60	107.82	786.42
1738		FG	5	678.60	107.82	786.42
1739		FG	4	598.50	148.90	747.40
1740		FG	5	678.60	107.82	786.42
1741	A	CG	3	495.30	123.03	618.33
1741	B	CG	2	422.70	130.14	552.84
1742		FG	4	598.50	148.90	747.40
1743	A	CG	3	495.30	123.03	618.33
1743	B	CG	3	495.30	123.03	618.33
1744	A	CG	3	495.30	123.03	618.33
1744	B	CG	3	495.30	123.03	618.33

Facility Number	Unit Desig	Officer Grade	BAQ/ month(\$)	VHA/ month(\$)	Total Allowance	
1745		FG	4	598.50	148.90	747.40
1746	A	CG	2	422.70	130.14	552.84
1746	B	CG	3	495.30	123.03	618.33
1747		FG	4	598.50	148.90	747.40
1748		FG	5	678.60	107.82	786.42
1749	A	CG	3	495.30	123.03	618.33
1749	B	CG	3	495.30	123.03	618.33
1750	A	CG	3	495.30	123.03	618.33
1750	B	CG	3	495.30	123.03	618.33
1751	A	CG	3	495.30	123.03	618.33
1751	B	CG	3	495.30	123.03	618.33
1752	A	CG	1	377.70	136.22	513.92
1752	B	CG	3	495.30	123.03	618.33
1753	A	CG	4	598.50	148.90	747.40
1753	B	CG	1	377.70	136.22	513.92
1754	A	CG	1	377.70	136.22	513.92
1754	B	CG	4	598.50	148.90	747.40
1755		FG	2	422.70	130.14	552.84
1756		FG	4	598.50	148.90	747.40
1757		FG	3	495.30	123.03	618.33
1758	A	CG	2	422.70	130.14	552.84
1758	B	CG	2	422.70	130.14	552.84
1759	A	CG	3	495.30	123.03	618.33
1759	B	CG	3	495.30	123.03	618.33
1760	A	CG	2	422.70	130.14	552.84
1760	B	CG	2	422.70	130.14	552.84
1761		FG	5	678.60	107.82	786.42
1762		FG	5	678.60	107.82	786.42
1763	A	CG	2	422.70	130.14	552.84
1763	B	CG	3	495.30	123.03	618.33
1764	A	CG	1	377.70	136.22	513.92
1764	B	CG	3	495.30	123.03	618.33
1765	A	CG	3	495.30	123.03	618.33
1765	B	CG	3	495.30	123.03	618.33
1766	A	CG	3	495.30	123.03	618.33
1766	B	CG	3	495.30	123.03	618.33
1767	A	CG	3	495.30	123.03	618.33
1767	B	CG	3	495.30	123.03	618.33
1768		FG	5	678.60	107.82	786.42
1769		FG	4	598.50	148.90	747.40
1770	A	CG	3	495.30	123.03	618.33
1770	B	CG	3	495.30	123.03	618.33
1771	A	CG	3	495.30	123.03	618.33
1771	B	CG	3	495.30	123.03	618.33
1772		FG	4	598.50	148.90	747.40
1773		FG	4	598.50	148.90	747.40
1774	A	CG	3	495.30	123.03	618.33
1774	B	CG	2	422.70	130.14	552.84
1775	A	CG	3	495.30	123.03	618.33

Facility Number		Unit Desig	Officer Grade	BAQ/ month(\$)	VHA/ month(\$)	Total Allowance
1775	B	CG	3	495.30	123.03	618.33
1776		FG	4	598.50	148.90	747.40
1777	A	CG	3	495.30	123.03	618.33
1777	B	CG	3	495.30	123.03	618.33
1778	A	CG	3	495.30	123.03	618.33
1778	B	CG	3	495.30	123.03	618.33
1779		FG	4	598.50	148.90	747.40
1780	A	CG	4	598.50	148.90	747.40
1780	B	CG	2	422.70	130.14	552.84
1781	A	CG	3	495.30	123.03	618.33
1781	B	CG	3	495.30	123.03	618.33
1782		FG	3	495.30	123.03	618.33
1783		FG	4	598.50	148.90	747.40
1784	A	CG	2	422.70	130.14	552.84
1784	B	CG	3	495.30	123.03	618.33
1785	A	CG	3	495.30	123.03	618.33
1785	B	CG	3	495.30	123.03	618.33
1786		FG	5	678.60	107.82	786.42
1787	A	CG	3	495.30	123.03	618.33
1787	B	CG	4	598.50	148.90	747.40

Bethel Manor Officer Total \$ 167,330.49

Appendix E: MFH Assets, Bethel Manor - Enlisted

Facility Number	Unit Desig	Enlisted Grade	BAQ/ month(\$)	VHA/ month(\$)	Total Allowance	
1500	A	JE	6	402.00	123.84	525.84
1500	B	JE	5	361.50	118.76	480.26
1501	A	JE	5	361.50	118.76	480.26
1501	B	JE	6	402.00	123.84	525.84
1502	A	SE	8	468.30	167.02	635.32
1502	B	SE	5	361.50	118.76	480.26
1503	A	JE	5	361.50	118.76	480.26
1503	B	JE	5	361.50	118.76	480.26
1504	A	JE	4	314.40	98.83	413.23
1504	B	JE	6	402.00	123.84	525.84
1505	A	JE	5	361.50	118.76	480.26
1505	B	JE	6	402.00	123.84	525.84
1506	A	JE	4	314.40	98.83	413.23
1506	B	JE	6	402.00	123.84	525.84
1507	A	SE	8	468.30	167.02	635.32
1507	B	SE		0.00	0.00	0.00
1508	A	SE	7	435.30	134.54	569.84
1508	B	SE	7	435.30	134.54	569.84
1509	A	JE	5	361.50	118.76	480.26
1509	B	JE	5	361.50	118.76	480.26
1510	A	JE	5	361.50	118.76	480.26
1510	B	JE	5	361.50	118.76	480.26
1511	A	JE	5	361.50	118.76	480.26
1511	B	JE	6	402.00	123.84	525.84
1512	A	JE	5	361.50	118.76	480.26
1512	B	JE	5	361.50	118.76	480.26
1513	A	JE	5	361.50	118.76	480.26
1513	B	JE	6	402.00	123.84	525.84
1514	A	SE	7	435.30	134.54	569.84
1514	B	SE	9	508.20	157.13	665.33
1515	A	SE	7	435.30	134.54	569.84
1515	B	SE	6	402.00	123.84	525.84
1516	A	JE	6	402.00	123.84	525.84
1516	B	JE	6	402.00	123.84	525.84
1517	A	JE	5	361.50	118.76	480.26
1517	B	JE	5	361.50	118.76	480.26
1518	A	JE	6	402.00	123.84	525.84
1518	B	JE	6	402.00	123.84	525.84
1519	A	SE	8	468.30	167.02	635.32
1519	B	SE	9	508.20	157.13	665.33
1520	A	SE	7	435.30	134.54	569.84
1520	B	SE	7	435.30	134.54	569.84
1521	A	SE	5	361.50	118.76	480.26
1521	B	SE	7	435.30	134.54	569.84
1522	A	SE	4	314.40	98.83	413.23
1522	B	SE	4	314.40	98.83	413.23

Facility Number	Unit Desig	Enlisted Grade	BAQ/ month(\$)	VHA/ month(\$)	Total Allowance	
1523	A	SE	5	361.50	118.76	480.26
1523	B	SE	5	361.50	118.76	480.26
1524	A	SE	6	402.00	123.84	525.84
1524	B	SE	7	435.30	134.54	569.84
1525	A	SE		0.00	0.00	0.00
1525	B	SE	8	468.30	167.02	635.32
1526	A	SE	6	402.00	123.84	525.84
1526	B	SE	6	402.00	123.84	525.84
1527	A	SE	8	468.30	167.02	635.32
1527	B	SE	7	435.30	134.54	569.84
1528	A	JE	6	402.00	123.84	525.84
1528	B	JE	5	361.50	118.76	480.26
1529	A	SE	5	361.50	118.76	480.26
1529	B	SE	6	402.00	123.84	525.84
1530	A	JE	7	435.30	134.54	569.84
1530	B	JE	5	361.50	118.76	480.26
1531	A	SE	5	361.50	118.76	480.26
1531	B	SE	5	361.50	118.76	480.26
1532	A	JE	5	361.50	118.76	480.26
1532	B	JE	4	314.40	98.83	413.23
1533	A	SE	7	435.30	134.54	569.84
1533	B	SE	5	361.50	118.76	480.26
1534	A	JE	5	361.50	118.76	480.26
1534	B	JE	6	402.00	123.84	525.84
1535	A	JE	5	361.50	118.76	480.26
1535	B	JE	6	402.00	123.84	525.84
1536	A	JE	6	402.00	123.84	525.84
1536	B	JE	4	314.40	98.83	413.23
1537	A	JE	4	314.40	98.83	413.23
1537	B	JE	6	402.00	123.84	525.84
1538	A	JE	4	314.40	98.83	413.23
1538	B	JE	4	314.40	98.83	413.23
1539	A	JE	5	361.50	118.76	480.26
1539	B	JE	5	361.50	118.76	480.26
1540	A	JE	7	435.30	134.54	569.84
1540	B	JE	6	402.00	123.84	525.84
1541	A	SE	7	435.30	134.54	569.84
1541	B	SE	8	468.30	167.02	635.32
1542	A	JE	6	402.00	123.84	525.84
1542	B	JE	5	361.50	118.76	480.26
1543	A	JE	6	402.00	123.84	525.84
1543	B	JE	5	361.50	118.76	480.26
1544	A	SE	7	435.30	134.54	569.84
1544	B	SE	7	435.30	134.54	569.84
1545	A	JE	5	361.50	118.76	480.26
1545	B	JE	6	402.00	123.84	525.84
1546	A	SE	5	361.50	118.76	480.26
1546	B	SE	7	435.30	134.54	569.84
1547	A	JE	7	435.30	134.54	569.84

Facility Number	Unit Desig	Enlisted Grade	BAQ/ month(\$)	VHA/ month(\$)	Total Allowance	
1547	B	JE	5	361.50	118.76	480.26
1548	A	JE	5	361.50	118.76	480.26
1548	B	JE	6	402.00	123.84	525.84
1549	A	SE	5	361.50	118.76	480.26
1549	B	SE	7	435.30	134.54	569.84
1550	A	JE	5	361.50	118.76	480.26
1550	B	JE	6	402.00	123.84	525.84
1551	A	JE	5	361.50	118.76	480.26
1551	B	JE	5	361.50	118.76	480.26
1552	A	JE	4	314.40	98.83	413.23
1552	B	JE	5	361.50	118.76	480.26
1553	A	JE	6	402.00	123.84	525.84
1553	B	JE	5	361.50	118.76	480.26
1554	A	JE	5	361.50	118.76	480.26
1554	B	JE	6	402.00	123.84	525.84
1555	A	JE	6	402.00	123.84	525.84
1555	B	JE	4	314.40	98.83	413.23
1556	A	JE	6	402.00	123.84	525.84
1556	B	JE	5	361.50	118.76	480.26
1557	A	JE	5	361.50	118.76	480.26
1557	B	JE	6	402.00	123.84	525.84
1558	A	JE	5	361.50	118.76	480.26
1558	B	JE	5	361.50	118.76	480.26
1559	A	JE	5	361.50	118.76	480.26
1559	B	JE	6	402.00	123.84	525.84
1560	A	JE	4	314.40	98.83	413.23
1560	B	JE	6	402.00	123.84	525.84
1561	A	JE	4	314.40	98.83	413.23
1561	B	JE	4	314.40	98.83	413.23
1562	A	JE	5	361.50	118.76	480.26
1562	B	JE	6	402.00	123.84	525.84
1563	A	JE	6	402.00	123.84	525.84
1563	B	JE	5	361.50	118.76	480.26
1564	A	JE	5	361.50	118.76	480.26
1564	B	JE	6	402.00	123.84	525.84
1565	A	JE	4	314.40	98.83	413.23
1565	B	JE	5	361.50	118.76	480.26
1566	A	JE	6	402.00	123.84	525.84
1566	B	JE	6	402.00	123.84	525.84
1567	A	JE	6	402.00	123.84	525.84
1567	B	JE	5	361.50	118.76	480.26
1568	A	JE	5	361.50	118.76	480.26
1568	B	JE	6	402.00	123.84	525.84
1569	A	JE	5	361.50	118.76	480.26
1569	B	JE	5	361.50	118.76	480.26
1570	A	JE	4	314.40	98.83	413.23
1570	B	JE		0.00	0.00	0.00
1571	A	SE	6	402.00	123.84	525.84
1571	B	SE	7	435.30	134.54	569.84

Facility Number	Unit Desig	Enlisted Grade	BAQ/ month(\$)	VHA/ month(\$)	Total Allowance	
1572	A	JE	5	361.50	118.76	480.26
1572	B	JE	5	361.50	118.76	480.26
1573	A	JE	5	361.50	118.76	480.26
1573	B	JE	5	361.50	118.76	480.26
1574	A	JE	5	361.50	118.76	480.26
1574	B	JE	5	361.50	118.76	480.26
1575	A	SE	5	361.50	118.76	480.26
1575	B	SE	5	361.50	118.76	480.26
1576	A	JE	5	361.50	118.76	480.26
1576	B	JE	4	314.40	98.83	413.23
1577	A	SE	6	402.00	123.84	525.84
1577	B	SE	7	435.30	134.54	569.84
1578	A	JE	7	435.30	134.54	569.84
1578	B	JE	5	361.50	118.76	480.26
1579	A	SE	9	508.20	157.13	665.33
1579	B	SE	7	435.30	134.54	569.84
1580	A	JE	6	402.00	123.84	525.84
1580	B	JE	7	435.30	134.54	569.84
1581	A	JE	5	361.50	118.76	480.26
1581	B	JE	5	361.50	118.76	480.26
1582	A	JE	5	361.50	118.76	480.26
1582	B	JE	5	361.50	118.76	480.26
1583	A	JE	6	402.00	123.84	525.84
1583	B	JE	4	314.40	98.83	413.23
1584	A	JE	6	402.00	123.84	525.84
1584	B	JE	5	361.50	118.76	480.26
1585	A	JE	4	314.40	98.83	413.23
1585	B	JE	6	402.00	123.84	525.84
1586	A	JE	6	402.00	123.84	525.84
1586	B	JE	7	435.30	134.54	569.84
1587	A	JE	5	361.50	118.76	480.26
1587	B	JE	5	361.50	118.76	480.26
1588	A	JE	7	435.30	134.54	569.84
1588	B	JE	9	508.20	157.13	665.33
1589	A	JE	5	361.50	118.76	480.26
1589	B	JE	5	361.50	118.76	480.26
1590	A	JE	6	402.00	123.84	525.84
1590	B	JE	5	361.50	118.76	480.26
1591	A	JE	5	361.50	118.76	480.26
1591	B	JE	5	361.50	118.76	480.26
1592	A	JE	6	402.00	123.84	525.84
1592	B	JE	5	361.50	118.76	480.26
1593	A	JE	7	435.30	134.54	569.84
1593	B	JE	4	314.40	98.83	413.23
1594	A	JE	6	402.00	123.84	525.84
1594	B	JE	5	361.50	118.76	480.26
1595	A	JE	6	402.00	123.84	525.84
1595	B	JE	5	361.50	118.76	480.26
1596	A	JE	5	361.50	118.76	480.26

Facility Number	Unit Desig	Enlisted Grade	BAQ/ month(\$)	VHA/ month(\$)	Total Allowance	
1596	B	JE	0.00	0.00	0.00	
1597	A	JE	5	361.50	118.76	480.26
1597	B	JE	5	361.50	118.76	480.26
1598	A	JE	5	361.50	118.76	480.26
1598	B	JE	5	361.50	118.76	480.26
1599	A	JE	6	402.00	123.84	525.84
1599	B	JE	5	361.50	118.76	480.26
1600	A	JE	5	361.50	118.76	480.26
1600	B	JE	5	361.50	118.76	480.26
1601	A	JE	6	402.00	123.84	525.84
1601	B	JE	6	402.00	123.84	525.84
1602	A	JE	5	361.50	118.76	480.26
1602	B	JE	6	402.00	123.84	525.84
1603	A	JE	4	314.40	98.83	413.23
1603	B	JE	4	314.40	98.83	413.23
1604	A	JE	5	361.50	118.76	480.26
1604	B	JE	4	314.40	98.83	413.23
1605	A	JE	5	361.50	118.76	480.26
1605	B	JE	5	361.50	118.76	480.26
1606	A	JE	6	402.00	123.84	525.84
1606	B	JE	5	361.50	118.76	480.26
1607	A	JE	7	435.30	134.54	569.84
1607	B	JE	5	361.50	118.76	480.26
1608	A	SE	7	435.30	134.54	569.84
1608	B	SE	5	361.50	118.76	480.26
1609	A	SE	7	435.30	134.54	569.84
1609	B	SE	9	508.20	157.13	665.33
1610	A	SE	5	361.50	118.76	480.26
1610	B	SE	6	402.00	123.84	525.84
1611	A	SE	5	361.50	118.76	480.26
1611	B	SE	7	435.30	134.54	569.84
1612	A	SE	7	435.30	134.54	569.84
1612	B	SE	6	402.00	123.84	525.84
1613	A	SE	4	314.40	98.83	413.23
1613	B	SE	8	468.30	167.02	635.32
1614	A	SE	8	468.30	167.02	635.32
1614	B	SE	5	361.50	118.76	480.26
1615	A	SE	5	361.50	118.76	480.26
1615	B	SE	7	435.30	134.54	569.84
1616	A	SE	4	314.40	98.83	413.23
1616	B	SE	7	435.30	134.54	569.84
1617	A	SE	5	361.50	118.76	480.26
1617	B	SE	7	435.30	134.54	569.84
1618	A	SE	7	435.30	134.54	569.84
1618	B	SE	9	508.20	157.13	665.33
1850	A	JE	7	435.30	134.54	569.84
1850	B	JE	5	361.50	118.76	480.26
1851	A	JE	6	402.00	123.84	525.84
1851	B	JE	4	314.40	98.83	413.23

Facility Number	Unit Desig	Enlisted Grade	BAQ/ month(\$)	VHA/ month(\$)	Total Allowance	
1851	C	JE	6	402.00	123.84	525.84
1851	D	JE	5	361.50	118.76	480.26
1852	A	JE	6	402.00	123.84	525.84
1852	B	JE	5	361.50	118.76	480.26
1853	A	JE	5	361.50	118.76	480.26
1853	B	JE	5	361.50	118.76	480.26
1853	C	JE	4	314.40	98.83	413.23
1853	D	JE	5	361.50	118.76	480.26
1854	A	JE	5	361.50	118.76	480.26
1854	B	JE	5	361.50	118.76	480.26
1854	C	JE	5	361.50	118.76	480.26
1854	D	JE	6	402.00	123.84	525.84
1854	E	JE	5	361.50	118.76	480.26
1854	F	JE	6	402.00	123.84	525.84
1855	A	JE	5	361.50	118.76	480.26
1855	B	JE	4	314.40	98.83	413.23
1855	C	JE	5	361.50	118.76	480.26
1855	D	JE	5	361.50	118.76	480.26
1856	A	JE	5	361.50	118.76	480.26
1856	B	JE	5	361.50	118.76	480.26
1856	C	JE	5	361.50	118.76	480.26
1856	D	JE	6	402.00	123.84	525.84
1857	A	SE	5	361.50	118.76	480.26
1857	B	SE	5	361.50	118.76	480.26
1858	A	SE	5	361.50	118.76	480.26
1858	B	SE	5	361.50	118.76	480.26
1858	C	SE	5	361.50	118.76	480.26
1858	D	SE	4	314.40	98.83	413.23
1858	E	SE	5	361.50	118.76	480.26
1858	F	SE	5	361.50	118.76	480.26
1859	A	JE	7	435.30	134.54	569.84
1859	B	JE	5	361.50	118.76	480.26
1859	C	JE	5	361.50	118.76	480.26
1859	D	JE	6	402.00	123.84	525.84
1860	A	SE	4	314.40	98.83	413.23
1860	B	SE	4	314.40	98.83	413.23
1861	A	JE	6	402.00	123.84	525.84
1861	B	JE	6	402.00	123.84	525.84
1861	C	JE	4	314.40	98.83	413.23
1861	D	JE	6	402.00	123.84	525.84
1862	A	JE	5	361.50	118.76	480.26
1862	B	JE	5	361.50	118.76	480.26
1862	C	JE	6	402.00	123.84	525.84
1862	D	JE	5	361.50	118.76	480.26
1862	E	JE	5	361.50	118.76	480.26
1862	F	JE	5	361.50	118.76	480.26
1863	A	JE	5	361.50	118.76	480.26
1863	B	JE	5	361.50	118.76	480.26
1863	C	JE	5	361.50	118.76	480.26

Facility Number	Unit Desig	Enlisted Grade	BAQ/ month(\$)	VHA/ month(\$)	Total Allowance	
1863	D	JE	5	361.50	118.76	480.26
1863	E	JE	5	361.50	118.76	480.26
1863	F	JE	6	402.00	123.84	525.84
1864	A	JE	6	402.00	123.84	525.84
1864	B	JE	4	314.40	98.83	413.23
1865	A	JE	6	402.00	123.84	525.84
1865	B	JE	5	361.50	118.76	480.26
1865	C	JE	5	361.50	118.76	480.26
1865	D	JE	6	402.00	123.84	525.84
1866	A	JE	4	314.40	98.83	413.23
1866	B	JE	4	314.40	98.83	413.23
1866	C	JE	5	361.50	118.76	480.26
1866	D	JE	4	314.40	98.83	413.23
1867	A	JE	6	402.00	123.84	525.84
1867	B	JE	6	402.00	123.84	525.84
1867	C	JE	6	402.00	123.84	525.84
1867	D	JE	5	361.50	118.76	480.26
1868	A	JE	7	435.30	134.54	569.84
1868	B	JE	5	361.50	118.76	480.26
1868	C	JE	6	402.00	123.84	525.84
1868	D	JE	7	435.30	134.54	569.84
1868	E	JE	6	402.00	123.84	525.84
1868	F	JE	5	361.50	118.76	480.26
1869	A	SE	5	361.50	118.76	480.26
1869	B	SE	9	508.20	157.13	665.33
1869	C	SE	8	468.30	167.02	635.32
1869	D	SE	7	435.30	134.54	569.84
1869	E	SE	5	361.50	118.76	480.26
1869	F	SE	5	361.50	118.76	480.26
1870	A	JE	5	361.50	118.76	480.26
1870	B	JE	5	361.50	118.76	480.26
1871	A	JE	6	402.00	123.84	525.84
1871	B	JE	5	361.50	118.76	480.26
1871	C	JE	4	314.40	98.83	413.23
1871	D	JE	5	361.50	118.76	480.26
1872	A	JE	5	361.50	118.76	480.26
1872	B	JE	4	314.40	98.83	413.23
1872	C	JE	5	361.50	118.76	480.26
1872	D	JE	6	402.00	123.84	525.84
1873	A	SE	8	468.30	167.02	635.32
1873	B	SE	7	435.30	134.54	569.84
1873	C	SE	6	402.00	123.84	525.84
1873	D	SE	6	402.00	123.84	525.84
1873	E	SE	8	468.30	167.02	635.32
1873	F	SE	8	468.30	167.02	635.32
1874	A	SE	6	402.00	123.84	525.84
1874	B	SE	7	435.30	134.54	569.84
1874	C	SE	5	361.50	118.76	480.26
1874	D	SE	8	468.30	167.02	635.32

Facility Number	Unit Desig	Enlisted Grade	BAQ/ month(\$)	VHA/ month(\$)	Total Allowance	
1874	E	SE	4	314.40	98.83	413.23
1874	F	SE	5	361.50	118.76	480.26
1875	A	JE		0.00	0.00	0.00
1875	B	JE	6	402.00	123.84	525.84
1876	A	JE	5	361.50	118.76	480.26
1876	B	JE	5	361.50	118.76	480.26
1877	A	SE	4	314.40	98.83	413.23
1877	B	SE	8	468.30	167.02	635.32
1877	C	SE	5	361.50	118.76	480.26
1877	D	SE	6	402.00	123.84	525.84
1877	E	SE	5	361.50	118.76	480.26
1877	F	SE	4	314.40	98.83	413.23
1878	A	SE	5	361.50	118.76	480.26
1878	B	JE	6	402.00	123.84	525.84
1878	C	JE	5	361.50	118.76	480.26
1878	D	SE	7	435.30	134.54	569.84
1879	A	SE	6	402.00	123.84	525.84
1879	B	JE	7	435.30	134.54	569.84
1879	C	JE	6	402.00	123.84	525.84
1879	D	SE	5	361.50	118.76	480.26
1880	A	JE	6	402.00	123.84	525.84
1880	B	JE	5	361.50	118.76	480.26
1881	A	SE	4	314.40	98.83	413.23
1881	B	SE	6	402.00	123.84	525.84
1881	C	SE	7	435.30	134.54	569.84
1881	D	SE	5	361.50	118.76	480.26
1881	E	SE	7	435.30	134.54	569.84
1881	F	SE	6	402.00	123.84	525.84
1882	A	SE	6	402.00	123.84	525.84
1882	B	JE	5	361.50	118.76	480.26
1882	C	JE	5	361.50	118.76	480.26
1882	D	SE	5	361.50	118.76	480.26
1883	A	SE	8	468.30	167.02	635.32
1883	B	JE	6	402.00	123.84	525.84
1883	C	JE	5	361.50	118.76	480.26
1883	D	SE	6	402.00	123.84	525.84
1884	A	SE	7	435.30	134.54	569.84
1884	B	JE	6	402.00	123.84	525.84
1884	C	JE	5	361.50	118.76	480.26
1884	D	SE	6	402.00	123.84	525.84
1885	A	SE	5	361.50	118.76	480.26
1885	B	JE	6	402.00	123.84	525.84
1885	C	JE	5	361.50	118.76	480.26
1885	D	SE	7	435.30	134.54	569.84
1886	A	JE	6	402.00	123.84	525.84
1886	B	JE	6	402.00	123.84	525.84
1886	C	JE	5	361.50	118.76	480.26
1886	D	JE	4	314.40	98.83	413.23
1887	A	SE	5	361.50	118.76	480.26

Facility Number	Unit Desig	Enlisted Grade	BAQ/ month(\$)	VHA/ month(\$)	Total Allowance	
1887	B	JE	4	314.40	98.83	413.23
1887	C	JE	4	314.40	98.83	413.23
1887	D	SE	7	435.30	134.54	569.84
1888	A	JE	5	361.50	118.76	480.26
1888	B	JE	5	361.50	118.76	480.26
1889	A	JE	5	361.50	118.76	480.26
1889	B	JE	5	361.50	118.76	480.26
1889	C	JE	5	361.50	118.76	480.26
1889	D	JE	6	402.00	123.84	525.84
1890	A	SE	6	402.00	123.84	525.84
1890	B	JE	5	361.50	118.76	480.26
1890	C	JE	5	361.50	118.76	480.26
1890	D	SE	7	435.30	134.54	569.84
1891	A	JE	7	435.30	134.54	569.84
1891	B	JE	5	361.50	118.76	480.26
1891	C	JE	5	361.50	118.76	480.26
1891	D	JE	4	314.40	98.83	413.23
1892	A	SE	5	361.50	118.76	480.26
1892	B	JE	5	361.50	118.76	480.26
1892	C	JE	4	314.40	98.83	413.23
1892	D	SE	8	468.30	167.02	635.32
1893	A	SE	6	402.00	123.84	525.84
1893	B	SE	7	435.30	134.54	569.84
1893	C	SE	6	402.00	123.84	525.84
1893	D	SE	8	468.30	167.02	635.32
1893	E	SE	6	402.00	123.84	525.84
1893	F	SE	5	361.50	118.76	480.26
1894	A	JE	5	361.50	118.76	480.26
1894	B	JE	5	361.50	118.76	480.26
1895	A	JE	6	402.00	123.84	525.84
1895	B	JE	7	435.30	134.54	569.84
1896	A	JE	7	435.30	134.54	569.84
1896	B	JE	4	314.40	98.83	413.23
1896	C	JE	5	361.50	118.76	480.26
1896	D	JE	5	361.50	118.76	480.26
1896	E	JE	5	361.50	118.76	480.26
1896	F	JE	5	361.50	118.76	480.26
1897	A	JE	5	361.50	118.76	480.26
1897	B	JE	5	361.50	118.76	480.26
1897	C	JE	4	314.40	98.83	413.23
1897	D	JE	6	402.00	123.84	525.84
1898	A	JE	4	314.40	98.83	413.23
1898	B	JE	5	361.50	118.76	480.26
1898	C	JE	6	402.00	123.84	525.84
1898	D	JE	6	402.00	123.84	525.84
1899	A	JE	5	361.50	118.76	480.26
1899	B	JE	6	402.00	123.84	525.84
1899	C	JE	5	361.50	118.76	480.26
1899	D	JE	4	314.40	98.83	413.23

Facility Number	Unit Desig	Enlisted Grade	BAQ/ month(\$)	VHA/ month(\$)	Total Allowance	
1900	A	SE	6	402.00	123.84	525.84
1900	B	SE	7	435.30	134.54	569.84
1900	C	SE	4	314.40	98.83	413.23
1900	D	SE	4	314.40	98.83	413.23
1901	A	SE	5	361.50	118.76	480.26
1901	B	SE	5	361.50	118.76	480.26
1901	C	SE	8	468.30	167.02	635.32
1901	D	SE	7	435.30	134.54	569.84
1902	A	SE	6	402.00	123.84	525.84
1902	B	SE	7	435.30	134.54	569.84
1902	C	SE	4	314.40	98.83	413.23
1902	D	SE	5	361.50	118.76	480.26
1902	E	SE	6	402.00	123.84	525.84
1902	F	SE	5	361.50	118.76	480.26
1903	A	SE	5	361.50	118.76	480.26
1903	B	SE	8	468.30	167.02	635.32
1903	C	SE	7	435.30	134.54	569.84
1903	D	SE	8	468.30	167.02	635.32
1904	A	JE	6	402.00	123.84	525.84
1904	B	JE	5	361.50	118.76	480.26
1904	C	JE	6	402.00	123.84	525.84
1904	D	JE	5	361.50	118.76	480.26
1905	A	JE	6	402.00	123.84	525.84
1905	B	JE	4	314.40	98.83	413.23
1905	C	JE	4	314.40	98.83	413.23
1905	D	JE	5	361.50	118.76	480.26
1906	A	JE	5	361.50	118.76	480.26
1906	B	JE	4	314.40	98.83	413.23
1906	C	JE	6	402.00	123.84	525.84
1906	D	JE	5	361.50	118.76	480.26
1907	A	JE	6	402.00	123.84	525.84
1907	B	JE	4	314.40	98.83	413.23
1907	C	JE	4	314.40	98.83	413.23
1907	D	JE	5	361.50	118.76	480.26
1907	E	JE	5	361.50	118.76	480.26
1907	F	JE	5	361.50	118.76	480.26
1908	A	JE	5	361.50	118.76	480.26
1908	B	JE	4	314.40	98.83	413.23
1908	C	JE	6	402.00	123.84	525.84
1908	D	JE	4	314.40	98.83	413.23
1909	A	JE	6	402.00	123.84	525.84
1909	B	JE	5	361.50	118.76	480.26
1909	C	JE	4	314.40	98.83	413.23
1909	D	JE	6	402.00	123.84	525.84
1910	A	JE	5	361.50	118.76	480.26
1910	B	JE	5	361.50	118.76	480.26
1910	C	JE	5	361.50	118.76	480.26
1910	D	JE	7	435.30	134.54	569.84
1910	E	JE	4	314.40	98.83	413.23

Facility Number	Unit Desig	Enlisted Grade	BAQ/ month(\$)	VHA/ month(\$)	Total Allowance	
1910	F	JE	6	402.00	123.84	525.84
1911	A	JE	5	361.50	118.76	480.26
1911	B	JE	7	435.30	134.54	569.84
1911	C	JE	6	402.00	123.84	525.84
1911	D	JE	5	361.50	118.76	480.26
1912	A	JE	5	361.50	118.76	480.26
1912	B	JE	5	361.50	118.76	480.26
1912	C	JE	5	361.50	118.76	480.26
1912	D	JE	5	361.50	118.76	480.26
1913	A	JE	5	361.50	118.76	480.26
1913	B	JE	6	402.00	123.84	525.84
1913	C	JE	7	435.30	134.54	569.84
1913	D	JE	4	314.40	98.83	413.23
1914	A	JE	7	435.30	134.54	569.84
1914	B	JE	5	361.50	118.76	480.26
1914	C	JE	5	361.50	118.76	480.26
1914	D	JE	5	361.50	118.76	480.26
1915	A	JE	5	361.50	118.76	480.26
1915	B	JE	4	314.40	98.83	413.23
1915	C	JE	4	314.40	98.83	413.23
1915	D	JE	6	402.00	123.84	525.84
1915	E	JE	5	361.50	118.76	480.26
1915	F	JE	5	361.50	118.76	480.26
1916	A	JE	5	361.50	118.76	480.26
1916	B	JE	5	361.50	118.76	480.26
1916	C	JE	5	361.50	118.76	480.26
1916	D	JE	4	314.40	98.83	413.23
1917	A	JE	5	361.50	118.76	480.26
1917	B	JE	4	314.40	98.83	413.23
1917	C	JE	5	361.50	118.76	480.26
1917	D	JE	5	361.50	118.76	480.26
1918	A	JE	7	435.30	134.54	569.84
1918	B	JE	4	314.40	98.83	413.23
1918	C	JE	6	402.00	123.84	525.84
1918	D	JE	7	435.30	134.54	569.84
1919	A	JE	4	314.40	98.83	413.23
1919	B	JE	5	361.50	118.76	480.26
1919	C	JE	7	435.30	134.54	569.84
1919	D	JE	5	361.50	118.76	480.26
1920	A	JE	4	314.40	98.83	413.23
1920	B	JE	5	361.50	118.76	480.26
1920	C	JE	5	361.50	118.76	480.26
1920	D	JE	6	402.00	123.84	525.84
1921	A	JE	5	361.50	118.76	480.26
1921	B	JE	4	314.40	98.83	413.23
1921	C	JE	6	402.00	123.84	525.84
1921	D	JE	5	361.50	118.76	480.26
1922	A	JE	4	314.40	98.83	413.23
1922	B	JE	5	361.50	118.76	480.26

Facility Number	Unit Desig	Enlisted Grade	BAQ/ month(\$)	VHA/ month(\$)	Total Allowance	
1922	C	JE	6	402.00	123.84	525.84
1922	D	JE	4	314.40	98.83	413.23
2000	A	JE	5	361.50	118.76	480.26
2000	B	JE	7	435.30	134.54	569.84
2000	C	JE	7	435.30	134.54	569.84
2000	D	JE	6	402.00	123.84	525.84
2000	E	JE	6	402.00	123.84	525.84
2000	F	JE	6	402.00	123.84	525.84
2001	A	JE	5	361.50	118.76	480.26
2001	B	JE	6	402.00	123.84	525.84
2001	C	JE	5	361.50	118.76	480.26
2001	D	JE	5	361.50	118.76	480.26
2002	A	JE	6	402.00	123.84	525.84
2002	B	JE	6	402.00	123.84	525.84
2002	C	JE		0.00	0.00	0.00
2002	D	JE	5	361.50	118.76	480.26
2002	E	JE	6	402.00	123.84	525.84
2002	F	JE	4	314.40	98.83	413.23
2003	A	JE	7	435.30	134.54	569.84
2003	B	JE	5	361.50	118.76	480.26
2003	C	JE	6	402.00	123.84	525.84
2003	D	JE	7	435.30	134.54	569.84
2004	A	JE	5	361.50	118.76	480.26
2004	B	JE	7	435.30	134.54	569.84
2004	C	JE	5	361.50	118.76	480.26
2004	D	JE	6	402.00	123.84	525.84
2004	E	JE	7	435.30	134.54	569.84
2004	F	JE	7	435.30	134.54	569.84
2005	A	SE	7	435.30	134.54	569.84
2005	B	SE	8	468.30	167.02	635.32
2005	C	SE	6	402.00	123.84	525.84
2005	D	SE	6	402.00	123.84	525.84
2005	E	SE	8	468.30	167.02	635.32
2005	F	SE	7	435.30	134.54	569.84
2006	A	SE	5	361.50	118.76	480.26
2006	B	SE	7	435.30	134.54	569.84
2006	C	SE		0.00	0.00	0.00
2006	D	SE	7	435.30	134.54	569.84
2006	E	SE	7	435.30	134.54	569.84
2006	F	SE	7	435.30	134.54	569.84
2007	A	SE	8	468.30	167.02	635.32
2007	B	SE	7	435.30	134.54	569.84
2007	C	SE	8	468.30	167.02	635.32
2007	D	SE	8	468.30	167.02	635.32
2007	E	SE	7	435.30	134.54	569.84
2007	F	SE	7	435.30	134.54	569.84
2008	A	SE	7	435.30	134.54	569.84
2008	B	SE	5	361.50	118.76	480.26
2008	C	SE	9	508.20	157.13	665.33

Facility Number	Unit Desig	Enlisted Grade	BAQ/ month(\$)	VHA/ month(\$)	Total Allowance	
2008	D	SE	7	435.30	134.54	569.84
2008	E	SE		0.00	0.00	0.00
2008	F	SE	8	468.30	167.02	635.32
2009	A	SE	7	435.30	134.54	569.84
2009	B	SE	7	435.30	134.54	569.84
2009	C	SE	7	435.30	134.54	569.84
2009	D	SE	8	468.30	167.02	635.32
2010	A	SE	6	402.00	123.84	525.84
2010	B	SE	7	435.30	134.54	569.84
2010	C	SE	8	468.30	167.02	635.32
2010	D	SE	7	435.30	134.54	569.84
2011	A	SE	8	468.30	167.02	635.32
2011	B	SE	8	468.30	167.02	635.32
2011	C	SE	7	435.30	134.54	569.84
2011	D	SE	7	435.30	134.54	569.84
2011	E	SE	6	402.00	123.84	525.84
2011	F	SE	7	435.30	134.54	569.84
2012	A	SE	6	402.00	123.84	525.84
2012	B	SE	8	468.30	167.02	635.32
2012	C	SE	6	402.00	123.84	525.84
2012	B	SE	7	435.30	134.54	569.84
2012	E	SE	7	435.30	134.54	569.84
2012	F	SE	8	468.30	167.02	635.32
2013	A	SE	7	435.30	134.54	569.84
2013	B	SE	8	468.30	167.02	635.32
2013	C	SE	7	435.30	134.54	569.84
2013	D	SE	7	435.30	134.54	569.84
2013	E	SE	7	435.30	134.54	569.84
2013	F	SE	7	435.30	134.54	569.84
2014	A	SE	7	435.30	134.54	569.84
2014	B	SE		0.00	0.00	0.00
2014	C	SE	7	435.30	134.54	569.84
2014	D	SE	9	508.20	157.13	665.33
2014	E	SE	8	468.30	167.02	635.32
2014	F	SE	8	468.30	167.02	635.32
2015	A	JE	6	402.00	123.84	525.84
2015	B	JE	5	361.50	118.76	480.26
2015	C	JE	6	402.00	123.84	525.84
2015	D	JE	6	402.00	123.84	525.84
2016	A	JE	5	361.50	118.76	480.26
2016	B	JE	5	361.50	118.76	480.26
2016	C	JE	5	361.50	118.76	480.26
2016	D	JE	5	361.50	118.76	480.26
2017	A	JE	5	361.50	118.76	480.26
2017	B	JE	5	361.50	118.76	480.26
2017	C	JE	5	361.50	118.76	480.26
2017	D	JE	6	402.00	123.84	525.84
2018	A	JE	4	314.40	98.83	413.23
2018	B	JE	5	361.50	118.76	480.26

Facility Number	Unit Desig	Enlisted Grade	BAQ/ month(\$)	VHA/ month(\$)	Total Allowance	
2018	C	JE	6	402.00	123.84	525.84
2018	D	JE	6	402.00	123.84	525.84
2018	E	JE	9	508.20	157.13	665.33
2018	F	JE	6	402.00	123.84	525.84
2019	A	JE	6	402.00	123.84	525.84
2019	B	JE	6	402.00	123.84	525.84
2019	C	JE	5	361.50	118.76	480.26
2019	D	JE	5	361.50	118.76	480.26
2019	E	JE	5	361.50	118.76	480.26
2019	F	JE	6	402.00	123.84	525.84
2020	A	JE	4	314.40	98.83	413.23
2020	B	JE	5	361.50	118.76	480.26
2020	C	JE	6	402.00	123.84	525.84
2020	D	JE	6	402.00	123.84	525.84
2021	A	JE	5	361.50	118.76	480.26
2021	B	JE	5	361.50	118.76	480.26
2021	C	JE	6	402.00	123.84	525.84
2021	D	JE	4	314.40	98.83	413.23
2021	E	JE	6	402.00	123.84	525.84
2021	F	JE	6	402.00	123.84	525.84
2022	A	JE	6	402.00	123.84	525.84
2022	B	JE	6	402.00	123.84	525.84
2022	C	JE	5	361.50	118.76	480.26
2022	D	JE	7	435.30	134.54	569.84
2022	E	JE	5	361.50	118.76	480.26
2022	F	JE	6	402.00	123.84	525.84
2023	A	JE	6	402.00	123.84	525.84
2023	B	JE	4	314.40	98.83	413.23
2023	C	JE	4	314.40	98.83	413.23
2023	D	JE	7	435.30	134.54	569.84
2024	A	SE	7	435.30	134.54	569.84
2024	B	SE	4	314.40	98.83	413.23
2024	C	SE	8	468.30	167.02	635.32
2024	D	SE	7	435.30	134.54	569.84
2024	E	SE	7	435.30	134.54	569.84
2024	F	SE	8	468.30	167.02	635.32
2025	A	SE	6	402.00	123.84	525.84
2025	B	SE	7	435.30	134.54	569.84
2025	C	SE	7	435.30	134.54	569.84
2025	D	SE	7	435.30	134.54	569.84
2025	E	SE	5	361.50	118.76	480.26
2025	F	SE	7	435.30	134.54	569.84
2026	A	SE	9	508.20	157.13	665.33
2026	B	SE	6	402.00	123.84	525.84
2026	C	SE	9	508.20	157.13	665.33
2026	D	SE	8	468.30	167.02	635.32
2027	A	SE	7	435.30	134.54	569.84
2027	B	SE	7	435.30	134.54	569.84
2027	C	SE	8	468.30	167.02	635.32

Facility Number	Unit Desig	Enlisted Grade	BAQ/ month(\$)	VHA/ month(\$)	Total Allowance	
2027	D	SE	8	468.30	167.02	635.32
2027	E	SE	8	468.30	167.02	635.32
2027	F	SE	8	468.30	167.02	635.32
2028	A	SE	7	435.30	134.54	569.84
2028	B	SE	8	468.30	167.02	635.32
2028	C	SE	7	435.30	134.54	569.84
2028	D	SE	7	435.30	134.54	569.84
2029	A	SE	8	468.30	167.02	635.32
2029	B	SE	7	435.30	134.54	569.84
2029	C	SE	9	508.20	157.13	665.33
2029	D	SE	5	361.50	118.76	480.26
2030	A	SE	8	468.30	167.02	635.32
2030	B	SE	7	435.30	134.54	569.84
2030	C	SE		0.00	0.00	0.00
2030	D	SE	7	435.30	134.54	569.84
2030	E	SE	8	468.30	167.02	635.32
2030	F	SE	6	402.00	123.84	525.84
2031	A	SE	9	508.20	157.13	665.33
2031	B	SE	7	435.30	134.54	569.84
2031	C	SE	7	435.30	134.54	569.84
2031	D	SE		0.00	0.00	0.00
2032	A	JE	4	314.40	98.83	413.23
2032	B	JE	5	361.50	118.76	480.26
2032	C	JE	7	435.30	134.54	569.84
2032	D	JE	6	402.00	123.84	525.84
2033	A	JE	5	361.50	118.76	480.26
2033	B	JE	7	435.30	134.54	569.84
2033	C	JE	7	435.30	134.54	569.84
2033	D	JE	6	402.00	123.84	525.84
2034	A	JE		0.00	0.00	0.00
2034	B	JE	6	402.00	123.84	525.84
2034	C	JE	6	402.00	123.84	525.84
2034	D	JE		0.00	0.00	0.00
2035	A	JE	5	361.50	118.76	480.26
2035	B	JE	5	361.50	118.76	480.26
2035	C	JE	5	361.50	118.76	480.26
2035	D	JE	5	361.50	118.76	480.26
2035	E	JE	5	361.50	118.76	480.26
2035	F	JE	5	361.50	118.76	480.26
2036	A	JE	6	402.00	123.84	525.84
2036	B	JE	4	314.40	98.83	413.23
2036	C	JE	6	402.00	123.84	525.84
2036	D	JE	6	402.00	123.84	525.84
2036	E	JE	5	361.50	118.76	480.26
2036	F	JE	6	402.00	123.84	525.84
2037	A	JE	6	402.00	123.84	525.84
2037	B	JE	6	402.00	123.84	525.84
2037	C	JE	4	314.40	98.83	413.23
2037	D	JE	5	361.50	118.76	480.26

Facility Number	Unit Desig	Enlisted Grade	BAQ/ month(\$)	VHA/ month(\$)	Total Allowance	
2038	A	JE	5	361.50	118.76	480.26
2038	B	JE	5	361.50	118.76	480.26
2038	C	JE	6	402.00	123.84	525.84
2038	D	JE	6	402.00	123.84	525.84
2039	A	JE		0.00	0.00	0.00
2039	B	JE	5	361.50	118.76	480.26
2039	C	JE	5	361.50	118.76	480.26
2039	D	JE	4	314.40	98.83	413.23
2039	E	JE	5	361.50	118.76	480.26
2039	F	JE	5	361.50	118.76	480.26
2040	A	SE	6	402.00	123.84	525.84
2040	B	SE	8	468.30	167.02	635.32
2040	C	SE	8	468.30	167.02	635.32
2040	D	SE	5	361.50	118.76	480.26
2040	E	SE	7	435.30	134.54	569.84
2040	F	SE	7	435.30	134.54	569.84
2041	A	SE	9	508.20	157.13	665.33
2041	B	SE	7	435.30	134.54	569.84
2041	C	SE	7	435.30	134.54	569.84
2041	D	SE	7	435.30	134.54	569.84
2041	E	SE	9	508.20	157.13	665.33
2041	F	SE	7	435.30	134.54	569.84
2042	A	SE	7	435.30	134.54	569.84
2042	B	SE	9	508.20	157.13	665.33
2042	C	SE	4	314.40	98.83	413.23
2042	D	SE	5	361.50	118.76	480.26
2043	A	SE	7	435.30	134.54	569.84
2043	B	SE	6	402.00	123.84	525.84
2043	C	SE	8	468.30	167.02	635.32
2043	D	SE	9	508.20	157.13	665.33
2044	A	SE	5	361.50	118.76	480.26
2044	B	SE	7	435.30	134.54	569.84
2044	C	SE	7	435.30	134.54	569.84
2044	D	SE	8	468.30	167.02	635.32
2045	A	SE	8	468.30	167.02	635.32
2045	B	SE	7	435.30	134.54	569.84
2045	C	SE	8	468.30	167.02	635.32
2045	D	SE	6	402.00	123.84	525.84
2046	A	SE	9	508.20	157.13	665.33
2046	B	SE	7	435.30	134.54	569.84
2046	C	SE	7	435.30	134.54	569.84
2046	D	SE	8	468.30	167.02	635.32
2047	A	JE	7	435.30	134.54	569.84
2047	B	JE	6	402.00	123.84	525.84
2047	C	JE	5	361.50	118.76	480.26
2047	D	JE	5	361.50	118.76	480.26
2048	A	JE	6	402.00	123.84	525.84
2048	B	JE	7	435.30	134.54	569.84
2048	C	JE	6	402.00	123.84	525.84

Facility Number	Unit Desig	Enlisted Grade	BAQ/ month(\$)	VHA/ month(\$)	Total Allowance	
2048	D	JE	7	435.30	134.54	569.84
2049	A	JE	6	402.00	123.84	525.84
2049	B	JE	7	435.30	134.54	569.84
2049	C	JE	5	361.50	118.76	480.26
2049	D	JE	5	361.50	118.76	480.26
2050	A	JE		0.00	0.00	0.00
2050	B	JE	6	402.00	123.84	525.84
2050	C	JE	5	361.50	118.76	480.26
2050	D	JE	5	361.50	118.76	480.26
2050	E	JE	6	402.00	123.84	525.84
2050	F	JE		0.00	0.00	0.00
2051	A	JE	5	361.50	118.76	480.26
2051	B	JE	5	361.50	118.76	480.26
2051	C	JE	6	402.00	123.84	525.84
2051	D	JE	5	361.50	118.76	480.26
2052	A	JE	6	402.00	123.84	525.84
2052	B	JE	4	314.40	98.83	413.23
2052	C	JE	5	361.50	118.76	480.26
2052	D	JE	6	402.00	123.84	525.84
2052	E	JE	5	361.50	118.76	480.26
2052	F	JE	5	361.50	118.76	480.26
2053	A	JE	5	361.50	118.76	480.26
2053	B	JE	5	361.50	118.76	480.26
2053	C	JE	6	402.00	123.84	525.84
2053	D	JE	6	402.00	123.84	525.84
2053	E	JE	6	402.00	123.84	525.84
2053	F	JE	6	402.00	123.84	525.84
2054	A	JE		0.00	0.00	0.00
2054	B	JE	8	468.30	167.02	635.32
2054	C	JE	6	402.00	123.84	525.84
2054	D	JE	5	361.50	118.76	480.26
2054	E	JE	7	435.30	134.54	569.84
2054	F	JE	5	361.50	118.76	480.26
2055	A	JE	5	361.50	118.76	480.26
2055	B	JE	6	402.00	123.84	525.84
2055	C	JE	5	361.50	118.76	480.26
2055	D	JE	5	361.50	118.76	480.26
2056	A	JE	6	402.00	123.84	525.84
2056	B	JE	6	402.00	123.84	525.84
2056	C	JE	5	361.50	118.76	480.26
2056	D	JE	6	402.00	123.84	525.84
2056	E	JE	6	402.00	123.84	525.84
2056	F	JE	4	314.40	98.83	413.23
2057	A	JE	6	402.00	123.84	525.84
2057	B	JE	6	402.00	123.84	525.84
2057	C	JE	6	402.00	123.84	525.84
2057	D	JE	5	361.50	118.76	480.26
2058	A	JE	5	361.50	118.76	480.26
2058	B	JE	5	361.50	118.76	480.26

Facility Number	Unit Desig	Enlisted Grade	BAQ/ month(\$)	VHA/ month(\$)	Total Allowance	
2058	C	JE	7	435.30	134.54	569.84
2058	D	JE	6	402.00	123.84	525.84
2059	A	JE	5	361.50	118.76	480.26
2059	B	JE	6	402.00	123.84	525.84
2059	C	JE	6	402.00	123.84	525.84
2059	D	JE	6	402.00	123.84	525.84
2060	A	JE	4	314.40	98.83	413.23
2060	B	JE	5	361.50	118.76	480.26
2060	C	JE	5	361.50	118.76	480.26
2060	D	JE	4	314.40	98.83	413.23
2061	A	JE	5	361.50	118.76	480.26
2061	B	JE	6	402.00	123.84	525.84
2061	C	JE	6	402.00	123.84	525.84
2061	D	JE	4	314.40	98.83	413.23
2061	E	JE	5	361.50	118.76	480.26
2061	F	JE	5	361.50	118.76	480.26
2062	A	JE	6	402.00	123.84	525.84
2062	B	JE	5	361.50	118.76	480.26
2062	C	JE	6	402.00	123.84	525.84
2062	D	JE	7	435.30	134.54	569.84
2062	E	JE	4	314.40	98.83	413.23
2062	F	JE	5	361.50	118.76	480.26
2063	A	JE	7	435.30	134.54	569.84
2063	B	JE	6	402.00	123.84	525.84
2063	C	JE	5	361.50	118.76	480.26
2063	D	JE	5	361.50	118.76	480.26
2064	A	JE	4	314.40	98.83	413.23
2064	B	JE	6	402.00	123.84	525.84
2064	C	JE	5	361.50	118.76	480.26
2064	D	JE	6	402.00	123.84	525.84
2064	E	JE		0.00	0.00	0.00
2064	F	JE	5	361.50	118.76	480.26
2065	A	JE	6	402.00	123.84	525.84
2065	B	JE	5	361.50	118.76	480.26
2065	C	JE	6	402.00	123.84	525.84
2065	D	JE	5	361.50	118.76	480.26
2066	A	JE	5	361.50	118.76	480.26
2066	B	JE	5	361.50	118.76	480.26
2066	C	JE	6	402.00	123.84	525.84
2066	D	JE	6	402.00	123.84	525.84
2066	E	JE	7	435.30	134.54	569.84
2066	F	JE	5	361.50	118.76	480.26
2067	A	JE	6	402.00	123.84	525.84
2067	B	JE	6	402.00	123.84	525.84
2067	C	JE	5	361.50	118.76	480.26
2067	D	JE	6	402.00	123.84	525.84
2068	A	JE	5	361.50	118.76	480.26
2068	B	JE	5	361.50	118.76	480.26
2068	C	JE	7	435.30	134.54	569.84

Facility Number	Unit Desig	Enlisted Grade	BAQ/ month(\$)	VHA/ month(\$)	Total Allowance	
2068	D	JE	6	402.00	123.84	525.84
2068	E	JE	7	435.30	134.54	569.84
2068	F	JE	7	435.30	134.54	569.84
2069	A	JE	6	402.00	123.84	525.84
2069	B	JE		0.00	0.00	0.00
2069	C	JE	6	402.00	123.84	525.84
2069	D	JE	6	402.00	123.84	525.84
2069	E	JE		0.00	0.00	0.00
2069	F	JE	6	402.00	123.84	525.84
2070	A	JE	6	402.00	123.84	525.84
2070	B	JE		0.00	0.00	0.00
2070	C	JE	5	361.50	118.76	480.26
2070	D	JE	6	402.00	123.84	525.84
2071	A	JE	5	361.50	118.76	480.26
2071	B	JE	5	361.50	118.76	480.26
2071	C	JE	6	402.00	123.84	525.84
2071	D	JE	7	435.30	134.54	569.84
2072	A	SE	8	468.30	167.02	635.32
2072	B	SE	9	508.20	157.13	665.33
2072	C	SE	7	435.30	134.54	569.84
2072	D	SE	6	402.00	123.84	525.84
2073	A	SE	9	508.20	157.13	665.33
2073	B	SE	6	402.00	123.84	525.84
2073	C	SE	7	435.30	134.54	569.84
2073	D	SE	7	435.30	134.54	569.84
2073	E	SE	8	468.30	167.02	635.32
2073	F	SE	8	468.30	167.02	635.32
2074	A	SE	7	435.30	134.54	569.84
2074	B	SE	7	435.30	134.54	569.84
2074	C	SE	7	435.30	134.54	569.84
2074	D	SE	7	435.30	134.54	569.84
2074	E	SE	7	435.30	134.54	569.84
2074	F	SE	7	435.30	134.54	569.84
2075	A	SE	7	435.30	134.54	569.84
2075	B	SE	6	402.00	123.84	525.84
2075	C	SE	7	435.30	134.54	569.84
2075	D	SE	7	435.30	134.54	569.84
2075	E	SE	7	435.30	134.54	569.84
2075	F	SE	7	435.30	134.54	569.84
2076	A	SE	7	435.30	134.54	569.84
2076	B	SE	7	435.30	134.54	569.84
2076	C	SE	5	361.50	118.76	480.26
2076	D	SE	8	468.30	167.02	635.32
2076	E	SE	7	435.30	134.54	569.84
2076	F	SE	8	468.30	167.02	635.32
2077	A	JE	6	402.00	123.84	525.84
2077	B	JE	4	314.40	98.83	413.23
2077	C	JE	5	361.50	118.76	480.26
2077	D	JE	5	361.50	118.76	480.26

Facility Number	Unit Desig	Enlisted Grade	BAQ/ month(\$)	VHA/ month(\$)	Total Allowance	
2078	A	JE	6	402.00	123.84	525.84
2078	B	JE	7	435.30	134.54	569.84
2078	C	JE	4	314.40	98.83	413.23
2078	D	JE	6	402.00	123.84	525.84
2078	E	JE	6	402.00	123.84	525.84
2078	F	JE	6	402.00	123.84	525.84
2079	A	JE	5	361.50	118.76	480.26
2079	B	JE	6	402.00	123.84	525.84
2079	C	JE	7	435.30	134.54	569.84
2079	D	JE	5	361.50	118.76	480.26
2079	E	JE	6	402.00	123.84	525.84
2079	F	JE	6	402.00	123.84	525.84
2080	A	JE		0.00	0.00	0.00
2080	B	JE	6	402.00	123.84	525.84
2080	C	JE	6	402.00	123.84	525.84
2080	D	JE	5	361.50	118.76	480.26
2080	E	JE	6	402.00	123.84	525.84
2080	F	JE	4	314.40	98.83	413.23
2081	A	JE	5	361.50	118.76	480.26
2081	B	JE	6	402.00	123.84	525.84
2081	C	JE	6	402.00	123.84	525.84
2081	D	JE	5	361.50	118.76	480.26
2081	E	JE	6	402.00	123.84	525.84
2081	F	JE	5	361.50	118.76	480.26
2082	A	JE	6	402.00	123.84	525.84
2082	B	JE	6	402.00	123.84	525.84
2082	C	JE	4	314.40	98.83	413.23
2082	D	JE	5	361.50	118.76	480.26
2083	A	SE	7	435.30	134.54	569.84
2083	B	SE	7	435.30	134.54	569.84
2083	C	SE	7	435.30	134.54	569.84
2083	D	SE	5	361.50	118.76	480.26
2084	A	SE	7	435.30	134.54	569.84
2084	B	SE	7	435.30	134.54	569.84
2084	C	SE	8	468.30	167.02	635.32
2084	D	SE	6	402.00	123.84	525.84
2084	E	SE	7	435.30	134.54	569.84
2084	F	SE	7	435.30	134.54	569.84
2085	A	SE		0.00	0.00	0.00
2085	B	SE		0.00	0.00	0.00
2085	C	SE		0.00	0.00	0.00
2085	D	SE	8	468.30	167.02	635.32
2085	E	SE	8	468.30	167.02	635.32
2085	F	SE	9	508.20	157.13	665.33
2086	A	SE	5	361.50	118.76	480.26
2086	B	SE	7	435.30	134.54	569.84
2086	C	SE		0.00	0.00	0.00
2086	D	SE	8	468.30	167.02	635.32
2087	A	SE	8	468.30	167.02	635.32

Facility Number	Unit Desig	Enlisted Grade	BAQ/ month(\$)	VHA/ month(\$)	Total Allowance	
2087	B	SE	7	435.30	134.54	569.84
2087	C	SE	7	435.30	134.54	569.84
2087	D	SE	7	435.30	134.54	569.84
2087	E	SE		0.00	0.00	0.00
2087	F	SE	5	361.50	118.76	480.26
2088	A	SE	7	435.30	134.54	569.84
2088	B	SE	9	508.20	157.13	665.33
2088	C	SE	7	435.30	134.54	569.84
2088	D	SE	7	435.30	134.54	569.84
2089	A	JE	5	361.50	118.76	480.26
2089	B	JE	5	361.50	118.76	480.26
2089	C	JE	6	402.00	123.84	525.84
2089	D	JE	5	361.50	118.76	480.26
2089	E	JE	5	361.50	118.76	480.26
2089	F	JE	6	402.00	123.84	525.84
2090	A	JE	5	361.50	118.76	480.26
2090	B	JE	7	435.30	134.54	569.84
2090	C	JE		0.00	0.00	0.00
2090	D	JE	5	361.50	118.76	480.26
2090	E	JE	5	361.50	118.76	480.26
2090	F	JE	6	402.00	123.84	525.84
2091	A	JE	6	402.00	123.84	525.84
2091	B	JE	5	361.50	118.76	480.26
2091	C	JE	6	402.00	123.84	525.84
2091	D	JE	5	361.50	118.76	480.26
2091	E	JE	5	361.50	118.76	480.26
2091	F	JE	5	361.50	118.76	480.26
2092	A	SE	6	402.00	123.84	525.84
2092	B	SE	5	361.50	118.76	480.26
2092	C	SE	8	468.30	167.02	635.32
2092	D	SE	7	435.30	134.54	569.84
2092	E	SE	6	402.00	123.84	525.84
2092	F	SE	6	402.00	123.84	525.84
2093	A	SE	7	435.30	134.54	569.84
2093	B	SE	8	468.30	167.02	635.32
2093	C	SE	6	402.00	123.84	525.84
2093	D	SE	7	435.30	134.54	569.84
2093	E	SE	9	508.20	157.13	665.33
2093	F	SE	7	435.30	134.54	569.84
2094	A	SE	7	435.30	134.54	569.84
2094	B	SE	6	402.00	123.84	525.84
2094	C	SE	8	468.30	167.02	635.32
2094	D	SE	7	435.30	134.54	569.84
2095	A	SE		0.00	0.00	0.00
2095	B	SE	5	361.50	118.76	480.26
2095	C	SE	5	361.50	118.76	480.26
2095	D	SE	5	361.50	118.76	480.26
2095	E	SE	5	361.50	118.76	480.26
2095	F	SE	7	435.30	134.54	569.84

Facility Number	Unit Desig	Enlisted Grade	BAQ/ month(\$)	VHA/ month(\$)	Total Allowance	
2096	A	SE	7	435.30	134.54	569.84
2096	B	SE	8	468.30	167.02	635.32
2096	C	SE	6	402.00	123.84	525.84
2096	D	SE	5	361.50	118.76	480.26
2096	E	SE	7	435.30	134.54	569.84
2096	F	SE	7	435.30	134.54	569.84
2097	A	SE	8	468.30	167.02	635.32
2097	B	SE	8	468.30	167.02	635.32
2097	C	SE	6	402.00	123.84	525.84
2097	D	SE	9	508.20	157.13	665.33
2097	E	SE	6	402.00	123.84	525.84
2097	F	SE	6	402.00	123.84	525.84

Bethel Manor Enlisted Total \$ 522,748.28

Appendix F: FY 90 MFH Costs

This data was compiled from financial records, reports and plans maintained by 1 CSG/DEU who, at this time, and during the 1990 fiscal year, were responsible for the management of funds to support the Military Family Housing operation at Langley AFB.

DIRECT COSTS

1. Housing Management Personnel

Position	Authorized Grade	Grade Assigned
254365	GS 12	GS 12
379938	GS 09	GS 09/2
614407	GS 09	GS 09/2
687857	GS 08	GS 08/4
682144	GS 07	GS 07/6
254365	GS 07	GS 07/3
379941	GS 07	GS 07/2
254358	GS 07	GS 07/2
254358	GS 05	GS 05
379939	GS 05	GS 05/1
254358	GS 05	GS 05/4
379939	GS 04	GS 04/2

2. MFH Direct Administrative Costs (Program Element 72110)

Expense Element	Description	Actual FY 90 Expense (\$000)
39X	Civilian Personnel	272.6
40x	Travel & Transportation	7.5
514	Mobile Equipment	0.2
55301	Contract Education	0.4
609	Gen Support Supplies	35.5
628	Gen Support Equipment	3.2
639	Other Equipment	22.2
	Total PE 72110	\$ 341.6

3. MFH municipal services costs (Program Element 72120)

Expense Element	Description	Actual FY 90 Expense (\$000)
39X	Civilian Pay	43.4
514	Mobile Equipment Rental	0.1
531	Custodial	37.1
53330	Refuse Collection	106.5
609	Supplies	32.1
	Total PE 72120	\$ 219.2

4. MFH government owned furnishings (Program Element 72140)

Expense Element	Description	Actual FY 90 Expense (\$000)
39X	Civilian Pay	13.6
473	Equipment Rental	4.4
514	Mobile Equipment	0.1
59219	Misc Contractor Services	5.1
609	AF supplies	156.1
61930	NAFSF Supplies	43.4
	Total PE 72140	\$ 222.7

5. MFH utilities (Program Element 72811)

Expense Element	Description	Actual FY 90 Expense (\$000)
48010	Water	253.8
48020	Electric	1,692.1
48030	Gas	343.7
48040	Sewage	288.8
51350	Steam	29.2
642	Fuel Oil	105.0
	Total PE 74811	\$ 2,712.6

6. MFH maintenance & repair (Program Element 722XX)

Expense Element	Description	Actual FY 90 Expense (\$000)
39X	Civilian Pay	751.3
40X	TDY & Transportation	1.3
473	Rental of other Equipment	14.0
514	Mobile Equipment	3.0
52X	Fac Projects by Contract	1,433.6
531	Custodial	2.4
53102	All other Cust Services	0.9
53130	Contract Cust Service	78.7
53303	Sys & Equip Inspection	2.4
53309	All other CE Svc Contract	59.2
53310	Grounds Maint Contract	105.0
56919	Purch Equip Maint	39.3
59219	Misc Contract Services	17.2
609	AF Supplies	332.0
619	NAFSF Supplies	653.0
	Total PE 722XX	\$ 3,493.3

INDIRECT COSTS

1. MFH Security Police (SP) support

Month	Military Manpower Cost (\$000)
Oct 90	50.0
Nov 90	43.5
Dec 90	52.4
Jan 91	52.4
Feb 91	74.8
Mar 91	70.5
Average cost SP support per month	57.3
Annual Expense, Bethel Manor	687.2
Annual Expense Main Base	169.7
Total Annual Expense for MFH SP support	\$ 856.9

2. MFH Fire Department (FD) support

Military Grade	Pay Rate Hours/day/year (\$000)
E-5	32.0
E-5	32.0
E-4	27.2
E-3	22.9

Total Bethel Manor Fire Department Manpower/year	114.1
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Vehicle cost	
1 P-12 Pumper	115.8
Expected Life = 20 years	
Maintenance over life	34.0
Cost per year	7.5

Total Annual cost at Bethel Manor	\$ 121.6
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Estimated Cost for Main Base Housing Support

Avg cost per unit at Bethel Manor	0.1
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Estimated Annual cost for Main Base MFH units	30.0
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Total MFH Fire Department Support per year	\$ 151.6
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3. Public Utility Support

Fiscal Year	Project	Cost (\$000)
90	Upgrade Support Utilities	131.0
90	Alt Storm Sewer Line	118.6
90	Const Curbs/Gutters	39.2
90	Repair Sewer Main	37.3
90	Repair Fuel Line	22.4
90	Rpr Steam Lines Main Base	117.5
90	Maint/Rpr Pvmnts Basewide	389.0
Total FY 90 Public Utility Projects		\$ 855.0

Calculation of MFH "fair share"
for main base units:

# of facilities on Langley AFB	567
# of which are MFH	164
% of main base facilities that are MFH	29%
Total Annual Public Utility Cost Attributable to MFH	\$ 247.3

4. Military Manpower Costs of MFH Maintenance

Grade	Service Provided	Cost
E-4/5	Emergency W/O or J/O after duty hrs, main base (avg 2/day, 2 hrs each)	26.02/day 30.68/day
	Annual cost for emergency responses (\$000)	\$ 20.7
E-4	Entomology Services -Main Base, avg 60 hrs/mo -Bethel Manor, avg 16 hrs/mo	780.60/mo 208.16/mo
	Annual cost for Entomology services (\$000)	\$ 11.9
Total Annual Cost for Military Manpower Maintenance in MFH units (\$000)		\$ 32.6

CAPITAL IMPROVEMENT PROGRAM COSTS

1. FY 89 PAIP Authorization	\$ 4,118,600
2. FY 91 PAIP Authorization	\$ 4,765,500
Total PAIP Authorization	\$ 8,884,100
Avg term of construction	3 years
Avg PAIP expenditure/yr	\$ 1,480,700

TOTAL FY 90 MFH COSTS (000)

Total PE 72110	341.6
Total PE 72120	219.2
Total PE 72140	222.7
Total PE 74811	2,712.6
Total PE 722XX	3,493.3
Total PAIP	1,480.7
Total Security Police	856.9
Total Fire Department	151.6
Total Public Utility	247.3
Total Military Manpower	32.6

Total cost	\$ 9,758.4
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Total MFH units supported:

Main Base - Officer	105
Main Base - Enlisted	126
Bayview Towers - Enlisted	90
Bethel Manor - Officer	262
Bethel Manor - Enlisted	1038

Total number of MFH units	1621
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Annual Cost Per MFH Unit (\$000)	\$ 6.0
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Monthly cost per unit (\$)	\$ 501.67
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VITA

Captain Michael T. Ray was born 2 July 1961 in Warwick, Rhode Island. He graduated from the Shorecrest Preparatory School in St. Petersburg, Florida in 1979, attended Tulane University and entered the Reserve Officers Training Corps. He graduated from Tulane in 1984 with a Bachelor of Architecture and received his commission in the United States Air Force that same year. After serving as an architectural design engineer in the 56th Civil Engineering Squadron at MacDill AFB, Florida he was transferred to Kapaun Air Station, Germany. While at Kapaun AS Capt Ray served as the Allied Support Construction Program Manager for the European Communications Division headquarters. He was transferred to Ramstein AB, Germany in 1988 and served with the Engineering and Services Directorate of the US Air Forces Europe headquarters as a facility requirements program planner. He entered the Graduate Engineering Management Program in May 1990.

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REPORT DOCUMENTATION PAGE			Form Approved GSA GEN. REG. NO. 27	
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6. AUTHOR(S) Michael T. Ray, Captain, USAF				
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13. ABSTRACT (Maximum 200 words) The focus of this research was to determine the feasibility of operating Military Family Housing (MFH) as a business enterprise, based on rental income. A case study of the Langley AFB MFH operation during FY 90 was used to determine if housing allowances forfeited by residents of base housing would provide sufficient rental income to fund the annual operations, maintenance and capital improvement of the MFH assets. It further compared the descriptive data from Langley AFB to USAF averages to determine if the findings were generalizable across the Air Force. The case study showed that Basic Allowance for Quarters (BAQ) and Variable Housing Allowance (VHA) forfeitures of Langley MFH residents during FY 90 exceeded actual expenditures by 7%. This indicated that the Langley AFB MFH complex could operate as a business enterprise based on a rental income equal to the BAQ and VHA forfeited by its residents. A comparison of the Langley AFB MFH operation indicated that this may not be true of the average USAF MFH complex. Analysis of the descriptive data for MFH operations at other installations is required to determine the generalizability of the findings of this research.				
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